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"Quantam ego quidem video motus morborum fere omnes a motibus in systemate nervorum ita pendent ut morbi fere omnes quodammodo Nervosi dici queant."—CULLEN'S NOSOLOGY: BOOK II, P. 181—EDINBURG ED., 1780.

THE
Alienist and Neurologist

A JOURNAL OF
Scientific, Clinical and Forensic

*NEUROLOGY AND PSYCHOLOGY,
PSYCHIATRY AND NEURIATRY.*

Intended Especially to Subserve the Wants of the
General Practitioner of Medicine.

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MEMORIAL ADDRESS ON DR. TURNER'S LIFE AND WORK.*

BY T. D. CROTHERS, M. D.,
Supt. Walnut Lodge Hospital,
Hartford, Connecticut.

A MEMORIAL study of the life and work of Dr. Turner may be compared, literally, to that of a picket far out beyond the great army of science, marking out paths and clearing the way for the advancing hosts to follow.

These pioneer pickets are not recognized in their day and generation. Their work is criticised, condemned and misrepresented. Later, when the army of advance moves up and on, they are recognized as the great benefactors and leaders.

My purpose in this address is to briefly summarize the main facts of his history and follow it with some detailed studies of his particular work and its results.

Joseph Edward Turner was born in Bath, Maine, Oct. 5th, 1822. His ancestors came to this country in 1641. His father was one of the first settlers in that town and was a shipbuilder and farmer.

His mother was born in Ipswich, Mass. He began life as a clerk, studied medicine, was licensed to practice, opened an office in Trenton, New Jersey, about 1841.

*Delivered at the unveiling of the monument to the memory of Dr. Turner at Wilton, Conn., Oct. 27, 1909.

Soon after he became possessed with the idea of founding an inebriate asylum and gave up his work for that purpose. He made three visits to Europe during the next eight years in the interests of this cause. In 1852 he presented a large petition for a charter to build an inebriate asylum in the New York Legislature.

Two years later this charter was granted and a stock company organized, called the United States Inebriate Asylum Company, of which he was general manager and treasurer. In 1856 and 57 he secured large petitions to the Legislature of New York for the appropriation for 10 per cent. of the excise money to the institution.

In 1858 the city of Binghamton, New York, donated 250 acres of land for this purpose and the same year the corner stone of the asylum was laid.

In 1862 Dr. Turner married Miss Gertrude, the daughter of Col. Middlebrook, one of the oldest and most respected citizens of Wilton, Conn.

In 1864 the institution was opened for the reception of patients and Dr. Turner was made superintendent.

In 1867 he resigned and spent several years securing new subscriptions for the completion of the building and assignment of the original stock. In 1874 he projected the Woman's National Hospital at Wilton, Conn., and in 1881 a charter was granted by the state of Connecticut and the same year the ground was broken for the erection of a building.

Three years later the charter was repealed and in 1888 he issued a volume called *The History of the First Inebriate Asylum in the World*. The next year in 1889 he died at his home in Wilton, Conn.

During this period of 46 years his entire time was occupied in the promotion and development of institutions for the medical care of inebriates. He traveled continuously, calling on prominent men, securing their names to petitions, begging material for the building and planning to perfect the asylum at Binghamton and built one at Wilton, Conn.

It was an incessant preaching and teaching the doctrine that inebriety was a disease and curable in organized institutions, built for that specific purpose.

This most remarkable man and his work can be better understood by grouping a historic study under various topics.

THE MAN AND HIS PERSONALITY.

Dr. Turner was a man of medium height, compactly built, with a well formed head, clear cut features and a sharp kindly eye. His manner was intense, sympathetic and attractive.

His language was clear, decisive and the words used were accurate and suggestive. His illustrations were apt and graphic and his opinions and observations on matters outside of the great theme of his life showed wide reasoning, excellent judgment and clear recognition of men and events.

He dressed neatly and had a decided business and professional air and showed an interest in every subject and person he came in contact with.

In the early part of his career he was critical and sharp in his judgment of men and events, but never severe or harsh. Later he became broader and more charitable in his views and opinions.

There was a certain self confidence and poise in his manner and calm reserve that was not disturbed by outer conditions and gave the impression of a man of power and force.

He would have succeeded in any position in life, or in any business, and his intense earnestness and ability to adapt himself to all the conditions around him would have brought him into prominence as a leader.

His manner was dignified, sympathetic and intense. In the presentation of the great purposes of his life he was simply overwhelming, not only in suggestion, but a flood of arguments, facts and illustrations which were convincing.

There was a certain magnetism about the way in which he presented the facts which grew with every experience and very few persons could listen to him without being impressed with their reality.

As a preacher this personality would have attracted crowded audiences. As an advocate in courts of law and before a jury he would have forced conviction with every statement of facts and as a doctor he would have been an ideal man and the center of a large admiring circle.

Unreasoning men judged that this impulsive impetuosity was mercenary, but a closer acquaintance showed a delicate generosity and kindly spirit of a great mind, trying to overcome the confusion and doubts and make the facts clear for their sake and not for any ulterior purpose.

The great central thought of his life was to teach the world that the inebriate was diseased and could be cured. He did not repel the moralist who thought the malady was moral and could be cured by conversion and pledges, but he urged a higher view and a recognition that the physical conditions and surroundings of the inebriate should be changed and improved and the poisons from which he was suffering should be removed and then the moral and spiritual remedies could be applied together with physical agents that would bring about restoration.

He was repeatedly asked to take part in reform work and his answer was "restore the body, correct the surroundings, and then reform work will be natural and real, because the soil on which it must grow has been cultivated."

This idea of physical care and treatment filled his entire waking thoughts and the dream of his life was an institution where this work could be carried out.

The obstacles which he encountered only intensified his ambition and gave him greater energy and determination. Having built the asylum at Binghamton and failed to retain control he saw the possibility of building another on a grander scale and this idea possessed him almost to the verge of infatuation.

THE ORIGIN AND GROWTH OF THE PURPOSES OF HIS LIFE are of great interest and a repetition of what has been the history of the great pioneers in every advance of science.

Whenever a great truth comes up on the horizon of the world's progress, someone appears to teach its practical relation and incorporate it with the evolutionary march of the race.

Someone is always raised up to be a leader and teacher when the hour comes, and the facts dawn on the advanced movement of civilization.

Over 2000 years ago Ulpian, the great Roman Jurist,

urged that inebriety was a disease and should be treated in hospitals, the same as insanity or other illness.

From that time down to 1790 the idea was repeated at long intervals but made no impression. At this time Cabanis, a French philosopher, elaborated this subject at some length and published it widely.

In 1798 and in 1809 Dr. Benj. Rush, of Philadelphia, repeated this idea in several articles and books, urging that it was the only solution of the great drink problem.

In 1830, when Dr. Turner was only 8 years old, Dr. Eli Todd of the Hartford Insane Asylum, read a paper before the State Medical Society, urging the state to recognize the disease of inebriety and provide special institutions for its care.

This paper was widely scattered. Ten years later a student of Dr. Todd's, Dr. Woodard, of Worcester, wrote a paper on the same subject, which was very widely circulated. These papers were condemned as impractical, chimerical and attracted little or no attention.

In all probability Dr. Turner in his early student life came across copies of these papers and any previous convictions he had were stimulated and intensified by them.

In later life he said that as a boy he was called to take care of his uncle, suffering from an attack of delirium tremens, and the impression he received at that time was that inebriety was a disease and must be treated in hospitals the same as other diseases.

He referred to another incident in which a warm personal friend, under the influence of spirits, attempted to do violence to him and a few hours afterwards recovered and had no recollection of his conduct or words.

This experience no doubt deepened his previous impressions and convinced him that a new field for the medical treatment of these maladies must be revealed to the world and brought into practical service.

In 1840 the Washingtonian Movement began and was a great pledge signing crusade which swept over the country. It was estimated that over 5,000,000 persons signed the total abstinence pledge in the course of a few years.

Practical men realized that something more than pledges

were needed, and so lodging houses were opened by the Washingtonian Clubs to take care of the poor victims and protect them until they could secure a degree of restoration.

There can be no doubt that this movement was watched with great intensity by Dr. Turner, who saw its significance and realized that it indicated the recognition of the physical nature of the disorder and the coming of inebriate asylums and hospitals where they could be housed and cured.

This thought found abundant confirmation in the penal treatment by the courts and in the hospital treatment of the more chronic cases, and grew to be a positive conviction, sustained by evidence from every side.

THE WORK AND ITS RESULTS

showed that Dr. Turner realized that the idea of an institution must be based on data, secured by circulars and was not a matter of opinions; also that the public must be impressed by figures and statistics that would admit of no other interpretation.

Evidently the first work he did was to send out circular letters to physicians, superintendents of insane asylums, prison authorities and others, asking for statistics and opinions concerning the causes and conditions of inebriety and asking suggestions of what could be used most practically in the matter of cure.

He followed these by personal visits and interviews. In all probability the answers were unsatisfactory and the cold contempt which greeted him and indifference showed that the world was not prepared to take up this subject.

He probably realized that American medical men were dominated by the teachings and opinions of physicians of Great Britain and on the Continent and anything endorsed by foreign authorities would receive the greatest of respect and attention here.

Curiously enough this idea prevailed for more than half a century, but laterly within the last twenty years the reverse is coming into prominence.

This was the purpose of his early visit to London and the continent some time about 1843 or 1844. He spent his time

in visiting hospitals, calling on leading men, securing statistics and soliciting their interest and sympathy to have inebriety called a disease and to urge its treatment in hospitals.

He brought back with him a large number of letters, all expressing an interest in the subject, but in so conservative a tone as to be of little or no value. No doubt these letters aided him in influencing the leaders in the profession of this country. At least they secured respectful attention but beyond this little of anything was secured.

In 1848 he went abroad again. His visits were practically for the same purpose and extended to many of the large hospitals of the continent. In 1850 he made another visit to the continent, bringing back about the same kind of personal endorsement and letters of sympathy.

In the meantime he had kept up circular inquiries, writing and calling on different persons, soliciting their opinions and names on statements as to what was considered the best plans to promote this work.

About 1849 he began a petition for the organization of an institution which was circulated among business and professional men for signatures and this grew rapidly. The next year it was merged into a stock company and in the course of a year 140 persons agreed to form a stock company, paying \$10.00 a share, for the purpose of organizing and building an institution.

Later another petition was signed by several thousand persons and was presented to the New York Legislature, asking for a charter for a company called the United States Inebriate Asylum Company.

This petition was opposed and put over. Two years later in 1852 a charter was granted and the company formed and Dr. Turner was made treasurer and managing director.

In the name of this company Dr. Turner solicited donations of land for the building and by incessant personal effort succeeded in having the city of Binghamton give 250 acres of land for a hospital in the neighborhood of that city.

The ground was broken for the building in the year 1858. In the meantime the board of directors who were very eminent men and actively engaged in their private duties, were unable

to do much more than give their names and influence to help on the work, hence the burden fell on Dr. Turner, who traveled continuously, soliciting subscriptions of money and material for the building, securing names to petitions and influencing the legislatures and in every way promoting the cause generally.

It was thought best to change the name to The New York State Inebriate Asylum and have laws passed regulating the committment of cases and placing it on a par with other institutions.

This was secured by Dr. Turner, ably assisted by Dr. Valentine Mott, one of the greatest surgeons in America, who was president of the board of directors.

A monster petition was secured, asking the legislature to give one-tenth of the excise money for the purpose of building and maintaining the asylum. This petition received only one vote in the first session when presented.

The next year it passed by an overwhelming majority. This was due to Dr. Turner's personal efforts, visiting every prominent politician and securing the influence of their constituents and endorsement. It was a work that required nearly two years of tremendous effort.

In the meantime Dr. Turner drew the plans for the building at Binghamton and began its erection under his personal care and supervision. He hired the contractors and workmen and secured donations of building material and money and carried on the work with an energy and enthusiasm that was contagious.

During all this time he secured a petition, signed by over 1500 physicians, 60 leading judges, 600 prominent lawyers and over 5000 business men, asserting the need of such a hospital and begging the legislature and private individuals and the public generally to sustain it in every possible way.

This attracted a great deal of attention and was published in the large dailies. Many of the religious papers opposed it very bitterly and considered the entire effort an infidel one to dignify vice and excuse the drunkard, and give sympathy where it did not belong.

The more conservative men agreed that it was wise to

make the experiment and withhold judgment until it had been tested.

The facts were new and the opposition to their acceptance was intense and the board of directors as well as Dr. Turner himself received large numbers of letters protesting against the effort.

The struggle was to overcome this opposition by letters, personal appeals, visits, statistical evidence, and wherever Dr. Turner went his earnest and enthusiastic presentation of the facts made converts and friends.

The building was projected on a palace-like scale and built in the most substantial, artistic way and there were no debts, the activity of the building depending on the contributions, and finally in 1864 it was so far completed as to be open for the reception of patients.

It was intended to accommodate 300 persons and was to be equipped with elaborate Turkish and Roman baths, together with a chapel for religious services and a stage for dramatic and literary entertainments. Workshops, hot-houses, gardens and large fields for the cultivation of plants and the raising of produce, required for the needs of the institution, made it one of the most complete asylums erected at that time.

No patient could be received for less than six months, and military discipline and medical care was to be kept up constantly and each patient was to be treated as sick, diseased and requiring the best methods and means of physical restoration.

The opening of the institution brought a large number of incurable inebriates from the wealthy and influential families of the country and after the first glamor was over and they had become somewhat restored they began to rebel against restraint, the methods of management.

Then they appealed to their friends to help them, giving most exaggerated accounts of the superintendent and management. Intrigues of all kinds and efforts to embarrass and to complicate the work were poured in upon the management and board of directors.

It was the experimental stage of a new work and the

public thought that the opinions of patients were entitled to consideration and should be consulted.

Dr. Turner was emphatic in his convictions of what should be done and the board of management were weak and vacillating. Several of them were intensely selfish and grasping and tried to make the institution serve their own mercenary ends.

For the next three years a series of the most bitter recriminations between the board of managers and Dr. Turner and the friends of patients who sided with both parties in the controversy continued, to the injury of the institution and its work.

Finally these differences became irreconcilable and Dr. Turner resigned to save the work and give his opponents an opportunity to carry on the work according to their plans.

There was a marvelous generosity in this, that after having planned and built the institution and marked out its future, and then because the managers failed to sustain his plans and interposed all sorts of obstacles he gave it up rather than have the work destroyed.

On withdrawing from the active work in the institution he began to secure subscriptions to enlarge and perfect it and receive assignments of the original stockholders so as to have the building reinstated and placed under his direct care again.

During the next six years he visited every prominent man in the country, many of them over and over again, soliciting stock and subscriptions and explaining the plans and methods of the hospital at Binghamton.

Over 95 per cent. of the original stock of the company was transferred to him, making him the legal owner of the institution and the lists of subscribers had increased until it embraced many of the most intellectual men in the country.

The managers had turned the institution over to the state of New York without the assignment of the original stockholders and when Dr. Turner had secured these assignments to him, he began a suit against the state of New York for the restoration of the institution to its legal owners.

The management, realizing that if this suit was pressed they would be turned out and their methods of control would

be the subject of scrutiny and very likely destructive to their reputations, hence to prevent this they kept up a persistent persecution of slanders against Dr. Turner and his work, using the press wherever they could to destroy his influence.

Realizing that his claim would be opposed and that years would pass before a final settlement could be accomplished, he projected a Woman's National Hospital to be built at Wilton, Conn., along the same lines as Binghamton.

With a subscription book he started out, personally visiting prominent men in all parts of the country, soliciting subscriptions and material and money and exhibiting plans for the new building.

Notwithstanding the bitter criticism that followed him wherever he went he secured the largest personal endorsement and subscription list of names of leading men that had ever been given to any institution except that of Binghamton.

In 1881 a charter was secured from the Legislature of Connecticut. The citizens of Wilton and neighboring towns promised liberal contributions and a board of personal friends was gathered to second his efforts. The ground was broken for the new building in October in 1881, with appropriate services.

The plan of the asylum was spacious and artistic and was drawn up under the direction of a famous architect and in all probability was superior to that of any other institution.

The following four years were occupied in the same intense work which had characterized his earlier efforts, namely soliciting money and material and perfecting the plans for the endowment of a new building.

Suddenly the Legislature of Connecticut repealed the charter for the institution and the same old persecution which had followed him from Binghamton was apparent in the widespread efforts to advertise the fact that the charter had been repealed and bring out the doubtful character of the founder.

After the first shock of disappointment new plans were formed and arrangements for a stock company and a continuation of the building was perfected. Like the elder

Napoleon he never recognized defeat and, while driven back and forced to take a new course, his interest and determination were increased.

It was then that he determined to write the *History of the First Inebriate Asylum in the World*, giving an account of the difficulties and trials and including in it the opposition to the Wilton hospital. This book was published in a volume of 500 pages and is most pathetic in its account of the battles and struggles which he passed through.

With this book as evidence he started out with more enthusiasm and energy than ever, soliciting donations and rousing interest everywhere. His plans matured; capitalists rallied about him and material aid was offered and he was on the verge of putting it into practical materialization when suddenly the grim archer appeared and he was called away.

The week before his death several important interviews had been arranged and, as he said, he was nearer the consummation of his life purpose than ever before.

SOME OF THE DIFFICULTIES WHICH HE ENCOUNTERED.

The idea that an inebriate was diseased and could be cured by physical means in an institution was startling to the world fifty years ago. It appeared to be contradicted by personal experience and the various assertions of the victims themselves.

To the religious world it was rank heresy and infidelity. To the medical world it was quackish and to the business world it was absurd. Although the idea had been mentioned long before it had been repelled as unworthy of the slightest consideration.

Dr. Turner, as its advocate, was unknown, a young man, with nothing but enthusiasm to support his claims. Huxley said that every advance in scientific truth is rejected by authorities because it involves change and putting aside previous conceptions.

It was a most startling presumption from a practical point of view for a young, unknown man to throw his whole life into a tremendous effort to make the idea of disease and curability in asylums practical and have it accepted by the world, but he was hero in the largest sense of the word and

after years of most incessant effort his teaching took form and shape in a palace-like building at Binghamton and was opened for a practical demonstration of the truth of his ideal.

Then another great obstacle concentrated in the institution. The work was new and there was no experience or prestige to follow. Dr. Turner laid down a system of management, which 50 years later has been proven to be correct and thoroughly scientific, but at that time was denied and contradicted.

The genius of Dr. Turner in outlining and attempting to carry out at that early day a plan of treatment so complete in all its details is simply astonishing to us at this time.

The board of managers and the patients became the great obstacle to the growth of the institution. They assumed that Dr. Turner's medical knowledge was incompetent to personally care for such patients. While granting that he had great genius in the organization and building of the institution, they demanded that the institution should be conducted along lines of their own judgment.

Dr. Turner was neither a politician or diplomat, but he saw clearly that they were incompetent and without knowledge and refused to yield. Then the storm broke. Dishonest intriguers, wilful blunderers, personal selfishness gathered and drifted over the work of the institution and Dr. Turner was practically driven out.

The difficulties were greater than ever he had encountered before. Public sentiment could not be controlled. Political methods and schemes covered up all his advanced views and a great Bull Run defeat took place when he left the institution.

Had the board united with him in his far seeing plans the great obstacles would have been overcome and a great ideal establishment would have grown up.

Curiously enough the opposition and persecution kept public attention drawn to the work and the fight over Binghamton asylum stimulated an army of observers everywhere, to put into practice and test the correctness of the theories that were denied and advocated.

The result was that fully 50 institutions were established

in this country and Europe, all based on the ideals urged by Dr. Turner at Binghamton.

This opposition turned into persecution which at the time seemed fierce and cruel but later it was found to be the most significant endorsement of the man and his work.

When Tallyran was asked how a new religion could be introduced into the world, he said. "Have the promoter of it crucified and hanged as an imposter."

The asylum at Binghamton went down thirteen years after Dr. Turner left it in a fogbank of political dishonesty and incompetent management, but it proved to the world the great fact that inebriety was a disease and curable, although its demonstration was along entirely different lines, unknown by the management.

Institutions for the care of inebriates are still beset with difficulties. The armies of incurables bring problems that tax the greatest skill and energy to solve.

The quacks with their miraculous means and measures complicate the conditions, but each year bring into greater prominence the almost prophetic judgment of Dr. Turner.

The intensity of the personal persecution which followed him from Binghamton asylum and sought in every way to cripple and destroy his efforts is difficult to understand. While it repeats much of the history of the advances in the past, it is startling to think that men of intelligence should lend themselves to destroy and break down what they cannot understand.

Dr. Turner saw that notwithstanding the obstacles and the apparent failure of the institution at Binghamton, the great ideals of his life had materialized and been incorporated into the great working truths of the world. Then came the ambition to build up another institution on a broader basis with more certainty.

His effort to get control of the stock of the institution kept alive most vindictive slandering. Hence Dr. Turner preferred to work alone and to go on quietly with his plans and efforts. Influential friends offered from time to time to assist him, but this would bring prominence to his work,

which he wished to avoid until his work was matured beyond the power of misrepresentation.

Curiously enough a representative of the town of Wilton and another man in a neighboring town were found to sell out their influence and become active agents to continue this persecution. When these facts were brought to the Governor of the State he offered personally to lead in a stock company and have the charter renewed and give of his time and substance to correct this mistake.

Had Dr. Turner lived the state of Connecticut would have renewed the charter and given substantial aid to a most magnificent hospital here in Wilton. There is something very heroic in the endurance displayed in overcoming these obstacles and the marvelous faith that went on undaunted no matter what the difficulties were.

It was the spirit of the old martyrs who felt the breath of the upper air of progress upholding them through all the difficulties from trials that compassed them.

THE GENIUS OF DR. TURNER.

This was very evident in the fact of a young man, unknown, with limited training and acquaintance with the world, becoming possessed with the idea of introducing a great new truth and developing it. Those who knew him personally realized the inspiration and genius of his entire life.

There was a superior outlook and daring energy which pressed the thought with a positiveness that could not be mistaken. To strangers there was something mysterious in the loftiness of his mental ambition and purposes, which was interpreted in various ways according to the discernment of the person.

His genius was evident early in the monster petitions for the building of the institution, signed by eminent men, including two presidents of the United States. The hearty endorsement of his plans and appeals to the legislatures creating public sympathy and educating public sentiment despite the most adverse opinions was genius of the highest grade.

Obstacles made no impression except to rather increase

his energy and his whole life was one continuous journey without halting, changing or retrograde movements.

When he became superintendent of the Inebriate Asylum and his personal views of management and treatment were opposed by the board of trustees there was no variation or turning. He was right and he knew it, and the same masterly conception of what should be done and unflinching determination to carry out his ideals marked every step of the journey.

His genius was not confined to vitalizing the idea of disease of inebriety, and enlisting others to believe it and securing their personal influence, but it showed itself in the magnificent structure at Binghamton, which artistically and in many other ways was far ahead of the public buildings of that day.

The plan for the buildings at Wilton were equally comprehensive in beauty and adaptability. He knew what an institution should be, externally and internally, and he knew how it should be conducted and the great principles of treatment that should be applied.

We turn now to a phase of his character which was human in a startling degree. After the great shock in the loss of confidence and failure of the board of trustees at Binghamton to sustain him and their efforts to crush him out, there grew up in his mind doubts and fears which destroyed his confidence in other persons and their offers to join him and take part in his work.

He probably realized that anyone who united their fortunes or interests with him would have to encounter great difficulties and in all probability would fail in the time of strain and stress. Hence the idea grew that all future plans and materializations must come under his particular care and direction and be accomplished by him alone.

A great law firm in New York offered to conduct the suit against the state to recover the asylum at Binghamton and receive a certain percent. of the value as their fees. Other men made similar offers but they were all put off as matters to be considered in the future.

Two prominent men of wealth on several occasions offered to contribute the money necessary to build the asylum at Wilton, but the conditions repelled him.

The executor of a large estate offered to build the institution and when I personally chided him for not accepting the offer, he replied, "To do so, would be to lose control of the institution and this would be a source of future danger."

His dread of partnerships, associations, contracts and agreements in which others would have a part or equal share, seemed to grow with the years. He said that he would accomplish more personally and with full control of the destinies and future of the institution than with the help and assistance of others.

Many times during the last few years of his life, large sums of money were offered to him and while he probably would have availed himself of it in some way later, when the work had gone on, he hesitated at the time.

The bitter experience at Binghamton impressed him with a lurid fear of its repetition and while he planned a board for the asylum at Wilton and arranged all the details, he was to have central authority and control.

The repeal of the charter of the asylum at Wilton raised a number of very influential friends, who would have given substantial aid in the erection of the building. One man promised \$50,000 for a wing of the building if it would be named after his wife. Another proposed to erect the building personally and advance the money and trust to Dr. Turner's efforts to have it paid back.

The last year of his life he realized that something of this nature must be done and he had in his mind, no doubt, several plans in which his friends would have aided him.

In this brief memorial study it will be interesting to trace

SOME RESULTS AND CONCLUSIONS

which have followed from Dr. Turner's work.

It may be stated that his real work began some time about 1845 in the circulars addressed to the profession to secure their interest in the work. Sixty-four years have now passed and Dr. Turner's work practically covered over fifty years.

At the beginning he was unknown, without friends; influence or acquaintance. At his death he was widely known, not only in this country, but Europe, and now 10 years after

his death his name and reputation are growing steadily everywhere. Wherever institutions are opened for the care of inebriates and wherever the study of inebriety as a disease is mentioned the name of Dr. Turner marks the beginning.

In 1870 a society of medical men was formed in this country to study this subject purely from its scientific side and this society exists to-day and we, as its representatives, come here to pay tribute to the memory of our pioneer leader, Dr. J. Edward Turner.

In 1876 the first medical journal was published, devoted to this particular subject, called *The Journal of Inebriety*, which continues to the present day.

In 1880 an English society, composed entirely of physicians, was organized on the same basis for the same purpose, and in 1881 this society began the publication of a journal along the same lines which continues to the present.

In 1870 five societies of physicians and laymen were formed on the continent for the same study and each of them have published papers giving their transactions and studies.

The first inebriate asylum at Binghamton was followed by a large number of institutions, many of them charitable, and all founded on the same principle of disease and its curability.

In 1886 the number of institutions had increased in Great Britain to such an extent that a government inspector was appointed to grant licenses and superintend their management and prevent abuses that might grow up from them.

In 1889 an International Congress was held in London, in which the disease of inebriety and institutions for its cure were discussed in many papers and lasted over two days.

About this time a great wave of quack curers swept over this country and at one time more than 100 homes and asylums were opened for the cure of the inebriate. These have nearly all disappeared because of their empiric claims and conduct.

Every insane asylum in the country have special wards set apart for the care and treatment of inebriates and every private sanatorium receives such patients. The literature growing out of these two great journals, one in this country

and the other in England, has expanded into many volumes, and is growing more and more voluminous every day.

All this is the direct result of Dr. Turner's life work. Literally "a new land for medical practice" has been opened, and the inebriate is now recognized as sick and diseased and his treatment is a matter of physical means in the proper surroundings.

Dr. Turner's oft repeated statement that he would rather have built the asylum at Binghamton than been president of the United States is verified and the critics of his early day who thought he was only an enthusiast have disappeared.

The men who maliciously persecuted him literally contributed to his fame and reputation. They brought into prominence the great ideals of his life and kept them before the public until they were recognized as great working truths of the world.

This brief sketch of his life only brings an outline of some of the stirring events that followed his life and work which will appear in a volume at some future time.

Looking back from this point of view we can say with great certainty that this one man's life has changed and widened the great race march from the lower to the higher, that it has opened a new path of preventive medicine and pointed out a method of escape and made life brighter and clearer for vast numbers of the race.

I conclude by quoting a paragraph from Dr. Turner's *History of the First Inebriate Asylum in the World*, which, no doubt, contains a sort of an instinctive conception of the reality of his work which dawned upon him at that time.

"It has been discussed and decided by many of the friends of the founder, that a man who would exhaust his estate, mortgage his property, live in hotels and railroad cars for over a quarter of a century of his life, and permit himself to enjoy his home less than four weeks each year, giving his entire time for a great public cause, without any moneyed consideration, is either an idiot or a lunatic. Yet there are others who would make the same sacrifice, if called on to accomplish a similar great work. The real labor of the founder has gone over a period of nearly fifty years, in which he has fought a campaign

of battles and skirmishes with all sorts of success and failure. All the good men associated with him in this work have passed away and not one is left in this dark day to speak of the asylum history and its behalf.

“Although their labors in the material asylum have perished yet the idea which built it is immortal.”

HAZING PSYCHOPATHY.

A Warning Note from a Psychological Standpoint.

By C. H. HUGHES, M. D.

St. Louis.

A PROPENSITY to cruelty in hazing at college is not only an atavic appearance of barbarism, but it is suggestive of latent psychopathy in a civilized people, reappearing under conditions of stress of developing environment and circumstance, just as latent hysteria, insanity and other psychoneuroses show foreshadowing of developing precursory brainstorms before their completed culmination.

Hazing seems to be breaking out in bizarre and cruel forms in our colleges, as epidemic convulsions appeared in the middle ages under stress of excessive religious excitement, a sedentary life and the confinement of convent life at that time.

College life with its sport demands and late hours superadded to the curriculum of study requirements, seems to be too much for the steady stability of mental display in a certain proportion of our college students and they think they must break away from sedentary study routine by indulging displays of unique hazing outbursts, like certain other psychopaths in whom a bout of excessive drinking supplements insanity or an epileptic fit. Heretofore only young male students have displayed cruel hazing neuroses. Now, however, the girls are victims of the morbid impulse to harm their classmates. The worst display of this form of psychopathy is

reported at a certain State Normal School last November, in which six young women were implicated.

At the close of a football game, when this seminary was defeated by another ladies College, these six girls, it is charged, stripped one of their classmates, who had cheered for the victors, gave her a cold bath and painted her from head to foot with red paint as a punishment for her disloyalty.

This is a bad showing for level headedness on the part of these young lady students and though their ages are not given and probably hard to "get at" and though they were engaged in the stripping and painting business, they were neither striplings nor artists, it may be safely said.

These girls probably did not know what a perilous thing, aside from its naked barbarism, the painting of a person all over is. But the worst peril was to their own natures in arousing a latent psychopathic propensity into permanent life in their organisms.

Girls who can strip their classmates naked and paint them red are preparing themselves for painting the town red and the doing of other hysterical vagaries not good for psycho-neural health or sanity of brain and mind. Motherhood is ahead of some of these maidens when they will need steady neurones and power and propensity to stable brain and well entoned neuraxes. Nerve center power can be misused as well as money and other endowments.

The vocation of most of these offending young ladies are preparing for is to "teach the young idea how to shoot" aright, morally and intellectually. Hazing their sisters in this indelicate, cruel, barbaric fashion is rather embarrassing to contemplate in view of the probable careers awaiting these feminine pedagogues in embryo. It looks like a miscarriage of the teaching business.

Not all of these hazing virgins are necessarily psychoneuropathic, but certain of them must be, to devise and execute such improper, indecent, unmaidenly and cruel harm to schoolmates differing from them in preference for the success of a football game. Perhaps none, save the leaders in the harmful mischief, are so markedly neurotic now in their youth, that the wayfarer may see it, but such hazing is the out-

cropping in origin of psychic instability, to appear later in recognized psychopathy. Such hazing propensity is a precursor of insanity in some and had better be avoided.

Some of these young ladies (if we may rightly call them such) are influenced by the unrighteous suggestion and example of others, their acquiescence pointing to latent hysteria perhaps. Every feature of hazing that has cruelty, violent impropriety and Golden Rule defiance in it had better be discarded by both sexes, but especially by budding womanhood. There are ways enough to develop psychopathy already, without hazing, some of which are not likely to be escaped in these strenuous school days and conditions of necessarily adverse environment. Our colleges and universities appear to be growing too large, with too much ectopsychic strain for the neurone stability of many of the students.

There is an element of neurotic pathology in much of the world's vicious foolishness as there is markedly in many of its crimes. Active insanity often appears prominently in the latter and the precursory signs of oncoming mental aberration are manifest often in the former. It behooves wise educators, therefore, in our day and generation, even though

"A little nonsense now and then
Is relished by the best of men"

to guard against acts of viciousness and other hurtful folly, perilous to the developing brain stability of students.

Educators should train students while cramming their brains with mental pabulum, often too much ornamental and less useful than much omitted instruction, so that they may escape, if possible, in later life the evolution into active insanity of hereditary proclivities to instability of brain action. All institutions have a goodly share of entailed propensity to psychic instability among their classes and this unfortunate heritage is not always absent from the brains of instructors. As the care of the human mind, as the Hollandist philosopher Grotius said, is "the noblest branch of Medicine," so is it the most essential branch of pedagogics, hence this protest, from a medico-philanthropic point of view, against the harm to the hazers as well as the hazed victims of violent vicious hazing.

In happy contrast with the above it gives us pleasure to note that at least one university in the United States, viz.: the University of Wisconsin, has resolved by unanimous voluntary vote, of its students, to permanently abolish this degrading, demoralizing, barbarous brain and mind damaging, unfraternal custom.

A large book might be written on these and similar follies that lead to insanity in those psychopathically endowed.

It is to guard against bad conduct that may bring out the unstable and dangerous heritage of psychopathy, the latent tendency in the higher brain centers, that we are warning, and that should be a part of modern education. While cruel hazing is barbaric and condemnable on moral grounds, it should not be tolerated in educational institutions, because of the harm to both hazer and hazed likely to follow, in bringing into hurtful activity ancestrally damaged and transmitted brain neurones, with aptitude to go wrong under adverse environment and vicious habits.

The fright or terror of the hazed, the health harming and life endangering ordeal and the morbid excitement of the hazer are both wrong and the practice is wrong to both parties.

IS GENIUS A SPORT, A NEUROSIS, OR A CHILD POTENTIALITY DEVELOPED?*

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“THE marring and making influences of environment so constituted is more emphatic since generally first exerted during adolescence” which, as Stanley Hall† remarks, “is a new birth, for the higher and more completely human traits are now born. The qualities of body and soul that now emerge are far newer. The child comes from and harks back to a remoter past; the adolescent is neo-atavistic, and in him the later acquisitions of the race slowly become prepotent. Development is less gradual and more saltatory, suggestive of some ancient period of storm and stress when old moorings were broken and a higher locale attained. The annual rate of growth in height, weight and strength is increased and often doubled, and even more. Important functions previously non-existent arise. Growth of parts and organs loses its former proportions, some permanently and some for a season.

*Continued from November, 1909.

†Adolescence. Vol. 1.

Some of these are still growing in old age and others are soon arrested and atrophy. The old moduli of dimensions become obsolete and old harmonies are broken. The range of individual differences and average errors in all physical measurements and all psychic tests increases. Some linger long in the childish stage and advance late or slowly, while others push on with a sudden outburst of impulsion to early maturity. Bones and muscles lead all other tissues, as if they vied with each other, and there is frequent flabbiness or tension as one or the other leads. Nature arms youth for conflict with all the resources at her command—speed, power of shoulder, biceps, back, leg, jaw,—strengthens and enlarges the skull, thorax, hips, makes man aggressive and prepares woman's frame for maternity. The power of the diseases peculiar to childhood abates and liability to the far more marked diseases of maturity begins, so that with liability to both it is not strange that the dawn of the ephebic day is marked at the same time by increased morbidity, but diminished rates of mortality. Some disorders of arrest and defect as well as of excessive unfoldment in some function, part, or organ may now, after long study and controversy, be said to be established as peculiar to this period, and diseases that are distinctly school and city-bred abound, with apparently increasing frequency. The momentum of heredity often seems insufficient to enable the child to achieve this great revolution and come to complete maturity, so that every step of the upward way is strewn with wreckage of body, mind and morals. The cohesions between the elements of personality are loosened by the disparities of both somatic and psychic development, and if there is arrest at any stage or in any part before the higher unity is achieved there is almost sure to be degeneration and reunion on a lower level than before. One of the gravest dangers is the persistent ignoring by feminists of the prime importance of establishing normal periodicity in girls, to the needs of which everything else should for a few years be secondary.

The functions of every sense undergo reconstruction, and their relations to other psychic functions change, and new sensations, some of them very intense, arise, and new associa-

tions in the sense sphere are formed. Haptic impressions, appetite for food and drink and smell are most modified. The voice changes, vascular instability, blushing, and flushing are increased. Sex asserts its mastery in field after field, and works its havoc in the form of secret vice, debauch, disease and enfeebled heredity, cadences the soul to both its normal and abnormal rhythms, and sends many thousand youth a year to quacks, because neither parents, teachers, preachers, or physicians know how to deal with its problems. Thus the foundations of domestic, social, and religious life are oftenest undermined. Between religion and love God and nature have wrought an indissoluble bond so that neither can attain normality without that of the other. Secondary sexual qualities are shown to have an ever-widening range, and parenthood to mean more with every upward step of development. The youth craves more knowledge of body and mind, that can help against besetting temptations, aid in the choice of a profession, and if his intellect is normal he does not vex his soul overmuch about the logical character of the universe or the ultimate sanction of either truth or virtue. He is more objective than subjective, and only if his lust to know nature and life is starved does his mind trouble him by in-growing. There are new repulsions felt toward home and school, and truancy and runaways abound. The social instincts undergo sudden unfoldment and the new life of love awakens. It is the age of sentiment and of religion, of rapid fluctuation of mood and the world seems strange and new. Interest in adult life and in vocations develops. Youth awakes to a new world and understands neither it nor himself. The whole future of life depends on how the new powers now given suddenly and in profusion are husbanded and directed. Character and personality are taking form but everything is plastic. Self-feeling and ambition are increased and every trait and faculty is liable to exaggeration and excess. It is all a marvelous new birth and those who believe that nothing is so worthy of love, reverence and service as the body and soul of youth, and who hold that the best test of every human institution is how much it contributes to bring youth to the ever fullest possible development, may well review themselves and the civilization in

which we live to see how far it satisfies this supreme test.

Inner absorption and reverie is one marked characteristic of this age of transition. Who has not had spells of mental involution and absent-mindedness, when thoughts went "wool-gathering" and the soul was haunted by automatic presentations that take the reins from the will and lead us far away in a rapt state, now reminiscent, now anticipatory, into a world of dreams or ghosts? As we muse and brood, we seem to lapse to some unknown past that "hath elsewhere had its setting," of which, "the present seems a mere semblance," or to peer far into the future and "see the beauty of the world and all the glory that shall be." In these weird seizures, we lose touch with the world and move about "in a world not realized." Sometimes these states suggest the intellectual aura or voluminous mentation of epilepsy, and the day-dreamer goes about dazed like a somnambulist, and should be admitted to be legally irresponsible, because every act proves an alibi for attention. This may be the germ of some ancillary personality and lead to a double housekeeping of consciousness, or it may be incipient lunacy and suggest Lamb's remark to Coleridge, that no one knows the grandeur of fancy till he has been crazy. It may issue in the exotic and traditional states so religiously revered in the case of neurotic girls and constitutes, as Partidge has shown, one of the charms of many drugs and intoxicants. This preliminary expatiation of the soul over a vast realm, actual and possible, of life and mind, somewhere within which it will lay down the limits of its personality, is good for the strong and healthful, but dangerous for weak or *belastet* youth in this callow, pin-feather age. When we are wise enough to control "mental metabolism," we may be able to prescribe the place and function of these "voluminous mental states" to fit each individual need. The normal soul always soon comes back to the world of reality, perhaps wakes with a start, or may slowly ebb back, and is as powerless to revisit this subthalamic realm at will as it is to see stars or sea phosphorescence in sunshine. As Browne has well shown, if this efflorescence of meditateness or introspection has been too rank, prolonged or frequent, the subject may fall to thinking on emerging from them, as Blood did on emerging from the

influence of drugs or Davy from the long inhalation of dilute gas, or the hashish eater, that nothing is real, but thought, feeling and sensation, and thus he may be predisposed to become an adept in the occultism of epistemology if not solipsism: or he may lose the certainty or even sense of his personal identity and pinch himself to know if he is awake, wonder if he really lives, who he is and where, and if the actual world is really real. It is the birthday of the imagination. This has its morning twilight in reverie, and if brilliant and vivid, supplements every limitation, makes the feeble athletic, the beggar rich, knows no limitations of time or place, and is, in a word, the totalizing faculty. In its world all wishes are actualized and hundreds of our returns, elsewhere reported, show that in many sane children, their own surroundings not only shrivel but become dim and shadowy compared with the realm of fancy. This age is indeed sadly incomplete without illusions, and if the critical faculties which are later to slowly decompose them are not developed, the youth is rapt, apart, perhaps oblivious of his environment and unresponsive to its calls, because his dreams have passed beyond his nascent and inadequate power of control and become obsessions. Many states that become trance-like and absorptive are best described as the drunkenness of fancy, a state which may become habitual and passionate, but which, true to its secret nature, is unrevealed to others save in certain katatonic attitudes and a clumsiness to mundane reactions, such as Plato ascribes to the true philosopher. Here, near the verge of normality, belong many of the long-continued stories, imaginary companions, fancied but perhaps zoologically impossible animals and romances, of which the maker is always the center, which are at this time intensely real, but obeying the law of all psychic phenomena of pubescence, are transitory, so that scenes are always soon shifted for another play.

The ingenuous youth sees visions or dreams somewhat according as he is ear or eye-minded. The optical centers are especially sensitized to new harmonies of form and especially color; the mode of thought is pictorial and by images; and the ear now feels music and harmony, is attuned to sound and is amazingly sensitive to voices, tone-color, in-

flections, etc. Both the auditory and optic areas come into new connections with thought and speech music, phonisms, photisms, and probably number forms and exceptional psychic structures are now developed. Thought and the two higher senses are never so vivid and intense because they are just ready to bifurcate, each to lead its own life, so that the two are now peculiarly liable to be confused, intellectual processes to take sense forms and *vice versa*. It is for this reason that hallucinations, false sight and especially hearing, is most common; but in brains tainted by morbidity the faculty for discriminating mental from sense-forms is undeveloped, and dreamy conditions may become habitual, so that we see here the natural budding of insane perceptions. Perhaps the persistence in colleges of that form of critical philosophy, which devotes itself to discriminating the real from the phenomenal in sense-perception, is a hypertrophied relic of a long travel of the race to maintain this distinction for the practical purposes of life and is necessary for those who require years of sanitation to fully recover from the strain of pubic aberrations. Our returns give abundant illustration of an attitude of early pubescence when the gracious lies of fancy shade by strictly imperceptible gradations into the clear light of objective fact.

As the child's absorption of objects slowly gives place to consciousness of self, reflectiveness often leads to self-criticism and consciousness that may be morbid. He may become captious and censorious of himself or others. Ultimate questions that present the mysteries of things—why was I born? who made God? what is soul, matter, good?—press for answers. Conscience becomes so oversensitive that "anxiety about doing right exhausts the energy that should go to action, trifles are augmented to mountains, or debate with oneself as to what is right is carried so far as to paralyze decision," "and the natural hue of resolution is sicklied o'er with the pale cast of thought." Such boys rewrite a page rather than erase a false cross or dot, will never use a caret, stop in plowing if a single weed is missed, or in harvesting if a single head of wheat is lost. Details are exaggerated, irritability and pride of appearance and ideals of absolute perfection are seen. A girl would never take a pin or pick a flower without asking or

saying "thank you" for each flower. The slightest hint or frown of disapproval by others causes depression. A youth could never decide the smallest matter promptly without arguing the pro's and con's. Another was horrified at flitting fancies of crimes he might possibly commit. Sometimes imperative ideas crop out or uncontrollable fears arise. Others struggle intensely with secret religious doubts. Innocent things are sometimes magnified into sins of deepest dye. "Should I become a minister, a missionary, have a warm bed when others have a cold one, etc." and even more trivial queries may become morbidly intense. The avoidance of fatigue, an adviser who really understands the case, and fit religious training are cardinal needs. To love and care for these awkward, often unattractive neophytes is a specialty, and I believe is one of the types of genius which is never found among those who have exterminated in themselves too successfully the impulsion of youth.

Another trait is the over-assertion of individuality. This is germane to a state of nature when the child no longer needs the parental protection but, in primitive life and warm countries, breaks away and shifts for himself. Hitherto he has been the center in his environment, has been fed, sheltered and taught and with all the flush of morning and springtide hopes, goes out to maintain subsistence and ultimately to become the center of another family; all this before the longer apprenticeship to life which civilization has enforced was known. It is the time for large views and plans; life problems now press upon him; ambition and self-affirmation are never of such high selective value. His ego must be magnified and all in the new environment subordinated to it. Strife and labor, intensified and prolonged, are imperative. It is now or never, the impulsiveness of youth cannot wait and its ambition is never so exorbitant. Now, instead of head hunting, winning a new name, wrestling alone with spirits or other of the drastic imitations of savages, the civilized and more sedentary youth must vent his intensification of personal feeling in dreams of greatness—and who has not at this season been prince, millionaire, hero, walked with the great of earth or heaven, in reverie? Perhaps the very repressions of modern

life have given added color and range to the ideal. The youth's powers are now tested, and who knows but he may become the greatest among men? The whole soul is now protensive, and there is no life but in the realm of the possible, for the real is not yet. The sane man burns or distils these vaporings and they are unsuspected to those about him, and fade like shadows as the sun of reality rises, or are relegated to the realm of poetry and fiction. But if the reductives are undeveloped, or the energy of production over intense, they appear as delusions of greatness, so common and so manifold in precocious dementia, or they may culminate in impudence, contradiction and perhaps even in aggressiveness of the born criminal type, or may repel others by excessive irritability which becomes almost senile in pettishness and negativism, that is not only chronically cross, but that refuses to conform to every suggestion of friends by a contrary impulse so well characterized by Tarde in his *Opposition Universelle*.

Again, in this age, when everything is most uncertain, imitation reaches its acme, if we include its psychic as well as its merely attitudinal and motor forms. Youth must ape positions, expressions, gait and mien in order to understand and the new psychology of imitation shows that it is the basis of the social instinct of which also this age is the spring-time. Every peculiarity is mimicked and parodied, whether of phraseology, manner or mood. Every youth has a more or less developed stock of phrases, acts and postures, expressive of mimetic love, anger, fear, many occupations or vocations of infancy and old age, of the other sex, and he is plastic and suggestible to an amazing degree to everything of this kind in his environment. He catches the idiosyncrasies, accents and inflections of teachers and fellow pupils and re-enacts incidents; a little older, he is bemastered by the style of great authors he has read and is an adept at dialect and the personation of national types. Thus when the precocious dement apes other patients, perhaps following them about the wards to do so, as he is prone to in echopraxia, or repeats words in echolalia, or illustrates the automatism to command, so that any psychic influence about him may become a source of contagion, he is only an extreme type of what belongs to this age.

as one of its most integral traits, and merely lacks the higher power of co-ordinating it with the opposite motive of self-affirmation and independence.

Partly its imitative and partly its pragmatic nature makes youth dramatic, fond of assuming roles and poses of affectations and mannerisms, of attitudes and special movements, gestures, perhaps stereotyped, that may become as significant as slang. Normally these roles succeed each other and seem to be circumnutations of the instinct to explore all the possibilities of life in feeling and expression, as well as aids to sympathetic comprehension of situations and types of character. But just as speech may lose its higher function and lapse to not only slang, but even interjectional forms, so poses may slowly become fixed postures and even contractures, or a limited repertory of stereotyped acts may develop on a basis of the natural automatisms of Lindley. These manifestations are another of the characteristics of this degeneration. Its self-consciousness makes it peculiarly susceptible to criticism and suspicion that all its acts and sayings may be ridiculous. This is especially felt for the sentiments new-born at this age. Hence, partly to disguise these and partly from the very different propensity of lapsing to the lower plane of banality, we have silliness as a marked feature of adolescent wittlings. College songs, the absurdities of cork minstrelsy, the infantilism of Mother Goose, the eccentricities of enfeebled intelligence, so strongly entrenched on the variety stage, with its exaggerated oddities, freakishness and idiocies, foolish and funny acting, with every kind of grimace, have frequent illustrations in the lives of normal youth, with whom all this is spontaneous and intentional. This tendency is deep-seated in our organism, as Hall has elsewhere shown. But we have in the early dements copious illustrations of the ebullitions of unpremeditated and unrepressed folly, the most fatuous manifestations of which we should only laugh at were there but the power of voluntary self-restoration.

Youth normally comes into a new attitude toward speech at puberty. The vocabulary is enlarged; meanings are readjusted, words seem different; there is always a new speech consciousness; interest in new terms shows that in some cases

we have loquacity which becomes almost verbigeration; diaries and letters, and even stories and treatises are scribbled at great length. We often observe, too, an inverse ratio between thought and speech, so that as the former becomes scanty and indefinite the stream of words flows more copiously and smoothly; and conversely, as meanings deepen the vocabulary becomes more select and the lapse of speech and pen more restrained. In other normal types the mass of new inner experiences of thought, motive and sentiment prompt concealment and reticence and the subject becomes dumb-bound, silent and perhaps seems to brood, or the range of expression is very confined and narrow. Both these tendencies have asylum outcrops in Forel's "word-salad" or K1aft-Ebing's "word-husks" on the one hand, or in mumbling and taciturnity, even speechlessness, on the other.

Normally this is the social age where friendships, interests and sympathies with others ought to be at their strongest and best; but many a normal youth is shy, solitary, bashful and inclines to withdraw from the world and nourish his individuality in isolation. It is the age when, whatever we may hold regarding adult life, Godfernaux's conception of the dominance of sentiment over thought is not only true, but an admirable characterization. No stage of life is so prone to religious perturbations, which tend to become erratic as well as extreme. Speculation is trying its callow wings; sense solicitations are incessant and pervasive; competition makes tense every power of mind and body; the other sex, which had hardly existed before now turns on its subtle magnetism and establishes a new polarity; art, science and literature reveal their inner charm; the great elective system of the manifold vocations beckons in many directions at once; adult life, which had before seemed hazy and afar, because boyish interests expand horizontally along their own age level, now becomes a cynosure of fascinating absorption; a limbo of new temptations beckons or impels to the indulgence of passion or in the loss of orientation to truth, duty, health; all the possible permutations and combinations of error are illustrated in the aberrations of this formative period, so that the acceptance of any classification or systematization of its phenomena

would be premature and therefore unfortunate for both knowledge and practice.

Even in graver cases orientation in time and place may be unimpaired; school knowledge may be tolerably well preserved; the memory plexus, although in parts distorted and shot through by veins or delusionary eruptions, may be tolerably maintained and many old skills intact. Unfavorable as the prognosis is for mental restoration at any stage, it is extremely favorable for life. The temperature fluctuates between wide extremes and may become exceptionally low; the heart and arteries, which normally undergo such rapid changes at this stage, are often modified in their action and perhaps cyanosis or dermatography show the disorders of circulation. Pain and especially megrim, most common in girls of fourteen or fifteen, reflects vaso-motor irregularities. Excessive wakefulness and sleepiness, gormandizing or persistent refusal of food, which, like sadness and jollity, may alternate, exhibit the larger periodicities, while repetition, chewing, dancing, rocking and swaying show the disturbances of the shorter rhythms, to both of which this period is normally strangely susceptible.

(TO BE CONTINUED.)

THE INSANE.*

BY WILLIAM FRANCIS DREWRY, M. D.,

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(Abstract.)

Mr. President and Members of the Association:

I COME not as an entire stranger, nor am I altogether ignorant of the splendid work you are doing and your excellent methods of managing your institutions. Several years ago, as a member of a commission appointed by authority of the Virginia Legislature, I spent a most pleasant and profitable day or so at your Hospital for Epileptics. Since then I have visited four of your hospitals for the insane. If your other institutions have kept pace with the growth and progress of these, you must view your efforts with a considerable degree of satisfaction and encouragement.

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Knowing that I cannot add to your fund of knowledge, I shall merely comment on what you already know, in the hope that thereby you may be encouraged to apply that with possibly more satisfaction and better results. My only hope, then, is simply to strengthen and further emphasize some old truths by repeating them, taking to myself the flattering unction that sometimes a twice-told tale may interest and instruct. As Buckle says, "real knowledge consists not in an

*Read at Meeting of State Hospital Association, Gallipolis, Ohio, July 28, 1909, and published in full in Ohio Bulletin of Charities and Correction, November 1, 1909.

acquaintance with facts, which only makes a pedant, but in the use of facts, which makes a philosopher."

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It would be especially interesting to narrate the processes by which our States have undertaken such humane work and reached the present stage of development. Such a history would probably begin with the establishment, in 1769, at Williamsburg, Virginia, of the first state hospital on this continent for the "reception of idiots, lunatics and persons of insane and disordered minds." The next chapter would open with an account of the initial step in your state, in 1798, in the establishment of a private institution for the insane, followed, in 1838, by the opening of your first state hospital, at Columbus, which stands as one of the monuments to the humane spirit and intelligence of your people. Next, I should point to the hospital at my own home town, on the Appomattox, as the first institution built and maintained in America, or any other land, exclusively for the colored insane, which has grown from a population of 125, in 1870, to 1500, at the present time, showing that we have other problems than political in dealing with the "brother in black."

The narrative would be incomplete without mention of the pioneer work done by your state in the care of epileptics. The first step was taken in 1868, and resulted in the establishing, in 1891, of your hospital here, the first state institution of its kind in America. This would be followed by mention of the prolonged efforts in Virginia which are beginning to bear fruit in the establishment of an institution bearing the earmarks of yours.

To pursue the narrative a step further, I would tell that during the century and a half which has elapsed since the initial effort was taken at the second old colonial capital near the James, there have grown up within the borders of your state seven hospitals for the insane and one for epileptics, with a population of about 12,500, and, in mine, four for the insane (and soon there will be one for epileptics), with a census of nearly 4,000—all under the control and fostering care of the State, supported by means furnished by the people. In your state there are also excellent private institutions. It is grati

fying that in neither your state nor mine are there any insane in the jails and almshouses.

To go still further with my story, I would relate that, to supplement the work in each state and to bring about a deeper interest and stronger union of the forces engaged in the conduct of the institutions and the care and treatment of their inmates, each state has a well-organized Board of Charities and Correction, which, through its advisory, visitorial, inspectional and investigational functions, is constantly stimulating renewed effort on the part of the controlling and administrative forces, and contributing to the further advance of the great cause in which we are alike laboring. In this, your state was again one of the first to set a good example, your Board of Charities having been organized forty-two years ago. Virginia's Board came into existence last year.

* * * * *

Amazing progress has been made, especially during the past thirty years. We have seen in that time the birth of a new psychology and a broader psychiatry and more accurate clinical, pathological and therapeutic studies, leading to more satisfactory results, yet we are far from the goal we would reach. We know that many of the great problems touching insanity, and epilepsy as well, are still but partially solved, or solved not at all. We know, too, that many reforms are yet ahead of us.

The census report of 1904 gives the enormous number of 199,773 persons who were in institutions for the care of mental and nervous cases, and 17,000 who, on account of inherited or congenital mental defectiveness, were incapable of earning a livelihood. The estimated annual cost to the people to care for this large number of dependents is \$25,000,000. Out of the 85,000,000 people in this country about 150,000 have been certified as insane and committed to special institutional care, and about 5,000 are in special hospitals for epileptics. This is in the ratio of one insane person to every 530 of the population. In your state the ratio is one to 400; in mine one to 530.

Of the number of insane admitted annually to hospitals it is generally estimated that about twenty-five per cent recover and about the same proportion get well enough to take

fairly good care of themselves. There remain about fifty per cent who belong to the non-recovering and non-recoverable classes, that is, either die during their early hospital life or are relegated to the incurable class, becoming permanent charges upon the State the rest of their lives. A number die at home or in the jails and almshouses, or else pass their demented lives as useless citizens and a constant menace and burden to their friends and families. The excess of the number of permanent or incurable cases over the discharges from the hospitals, together with the annually increasing number of admissions, makes it necessary to provide additional room, or else our institutions become more and more overcrowded. They must be provided for somehow and somewhere. It has been estimated that each insane person means a loss to the State of about \$400 per annum, that is, an aggregate of \$60,000,000 for this country. This would mean an annual loss of about \$5,000,000, through insanity, to your State and \$1,500,000 to mine, in productiveness, to say nothing of the untold personal misery and distress to our people. To maintain our institutions and provide for the insane and epileptics requires large appropriations, increasing year after year. For instance, your State appropriates this year \$1,617,828 for the care of the insane and \$255,600 for the care of epileptics, a total of \$1,878,426. This is at the rate of about \$150 per patient.

The above facts give some general idea of the tremendous responsibility resting upon the State, as well as upon those individuals whom the State has appointed to represent her in the direct care and treatment of her unfortunate citizens. It is our especial duty, not only to make every possible effort to cure those placed through the legal processes under our care, but to give to the people that information and teach them those things which may lead to the reduction of degeneracy and make for a virile, healthy and happy race.

To stem the tide of increase of insanity, epilepsy, mental degeneracy and wreck, our first duty lies along the lines of prophylaxis and next in the persistent efforts in the utilization of every possible means of cure. This is an uncontrovertible truth—one beset with difficulties well-nigh impossible to sur-

mount, and involves problems yet unsolved and largely unsolvable. Nevertheless, by the application of knowledge we have already acquired, by tireless investigation and study and a wider dissemination of facts much more can be done and more satisfactory results attained than heretofore. In short, if we would reduce the number of the insane and epileptics and degenerates of every class, we should as far as possible remedy the conditions that are responsible for their existence.

From our studies of the psychology of the insane we learn that abnormal functioning of the nervous system results in abnormal mentation. The causes of insanity, then, may be divided into two general classes: first, an unstable and inefficient nervous system, which easily succumbs to stresses of life; second, physical or mental shock to the nervous system through diseases, toxic conditions, etc. The one is called enogenous, the other exogenous. The two classes of causes, however, usually co-exist and there is interaction between them. Heredity doubtless easily takes first place as an enogenous cause, but to what extent we are unable to tell, because of the lack of definite information. Because of its great importance as an etiological factor in insanity and epilepsy—accounting for, according to general estimates, fifty per cent or more of cases—the people should by every method possible be constantly told of the probable consequences of the union of the unfit. The enactment and enforcement of whatever laws regarding marriage or procreation may tend to the production of a stronger race is of paramount importance. Some States have enacted laws requiring a medical examination and certificate as a pre-requisite to obtaining a marriage license; in others there is enforced celibacy of the degenerate and the palpably unfit. Sterilization of such, though a rather harsh measure in a way, would seem to give the best promise of improving the race. Indeed, non-production must be the chief preventive measure, because hereditary degeneracy cannot be cured.

If the government would make more strenuous efforts to procure more accurate data regarding morbid heredity, in both the insane and the epileptics—including a more complete history of diseases in families—we would have at hand in-

formation of the greatest interest and value, from which more correct conclusions could be drawn and the problem of heredity made much easier of solution. As showing the modern trend, a great English university has taken an advanced step in establishing a chair of eugenics, with the purpose of investigating whatever concerns the breeding of healthier men, that the race may improve physically and mentally. All such movements as these mentioned here and elsewhere in this paper have been suggested or attempted on the ground that society has a right to protect itself from any influence which, if unrestrained, would do damage to the next generation.

In a most exhaustive and scholarly address before the National Conference of Charities and Correction, in 1908, on Heredity, Dr. James T. Searcy, of Alabama, truly says that it "is a most perplexing question, a most difficult one to solve and control, humanely. The ignorantly and purposely uncontrolled natural appetites of the large majority—rich and poor—tend to oppose and thwart race improvement." The very civilization of which we boast makes for the increase of insanity and degeneracy through heredity. The insane man, for instance, is carefully and scientifically nursed to mental health, or perhaps partially so, and then goes on procreating children with perhaps a predisposition to nervous instability, which leads often to some type of psychosis, epilepsy, inebriety, etc. An English writer (Stoddard) says that "among savage peoples the interests of the individual are subordinated to those of the race and mental selection is at work; while among civilized nations the interests of the race are subordinated to those of the individual, natural selection is allowed no play, and the result is the survival of the unfittest." There are those who advocate, not without sound reasoning, that it would not only be in the interest of public economy but decidedly for the elevation of the standard of future generations if all the congenital or incurable defectives were taken under the permanent care and supervision of the State.

While it is proper that the doctrine of heredity, that is, a constitutional tendency to acquire certain constitutional diseases which existed in one's ancestry, should be constantly preached, we should impress the fact that in a very large

measure the evil effects of this tendency can be controlled by the individual. Our brains are, after all, largely what we make them by proper training and by avoidance of those things which are detrimental. Some of these we shall now consider.

That alcohol, opium and cocaine in excess are frequent and potent factors of insanity, epilepsy, imbecility, dementia, etc., either directly or through a transmitted psychopathic or neuropathic derangement or an imperfect development, is an established fact. While it is difficult to ascertain in every instance whether the alcoholism or drug addiction is the cause or the effect, in the light of experience and observation in our institutions and our knowledge of the history of our patients, no further comment bearing on the general effects produced by these drugs and the inevitable results that would come from preventive measures is necessary.

There has been too much sentimentalism in dealing with the habitual drunkard, who is too often a menace and a danger to the community. He should be treated either as an offender against law and order or as a sick man. Those who wilfully refuse to control their appetites and become nuisances should be confined in jail and made to work under police authority and regulation. This should apply particularly to those who neglect or abuse their families. On the other hand, when an individual has become such a slave to drink or drugs that he cannot control his morbid appetite and desires, he should be placed under institutional care and treated for disease. This is not a new idea, but one which only a few of the States have adopted. As far back as 1812, Dr. Benjamin Rush recognized inebriety as a disease and recommended the establishment of hospitals for the exclusive reception of hard drinkers, "because," he said, "they are as much objects of public humanity and charity as mad people."

Let us ever bear in mind that the opium, cocaine and other drug habits have been increasing in this country, particularly during the past twenty years. According to the estimate by Wright, there were last year 100,000 white opium smokers in this country, as against Kane's estimate, in 1882, of only 6,000. The revenue authorities report that last year,

duty was paid on nearly 147,000 pounds of smoking opium and about 310,000 of the crude drug. Since the government prohibition of the importation of smoking opium, the importation of the crude drug has increased ten-fold. Most of the stuff finds its way to dives where "depraved men feast their minds on drug-stirred dreams and nerve their weakened bodies with its subtle poison."

We have another great danger to combat. I believe the time has come when the medical profession, within the proprieties of ethics, and perhaps law-makers and sociologists, should take up more seriously the question of venereal diseases and institute a general educational campaign and preventive measures against their spread. Syphilitic infection is responsible, directly or indirectly, for quite a proportion of idiocy, imbecility, dementia, epilepsy, insanity, nervous diseases, etc. Certainly it is the prime cause of most cases of that degenerating and incurable disease, general paresis, which has so far baffled science, though recent investigators, among them a bright young alienist of your state, have probably made some advance. On account of the insidious and disastrous effects of syphilis, not only on the primarily infected individual but on his progeny, the medical profession should take the lead and all intelligent people should support efforts to stop its dissemination and bring about as far as possible its extinction. It would not be an unjust abridgment of personal liberty, and would surely be for the general good, to apply, under medical advice and sanction, to primary syphilis, some adequate system of quarantine.

As a preventive measure against the future development of the psychoses and neuroses, more attention should be paid to scientific examination, proper physical training, sufficient rest and recreation, as well as to the avoidance of worry and emotional disturbances, of school children, those who work in factories and all youths about the age of puberty. Our educational systems, no less than parents, have been woefully negligent along these lines. There is too much over-mental and under-physical development of children. If mental and physical hygiene were made an important part of the public school course, there would doubtless be fewer collapses at the

critical periods of life. Such works as "*The Hygiene of the Mind*," by Dr. Clouston, or some similar work, should be closely studied and taught by our school teachers and professors. Other etiological factors of importance are to be found in dietetic indiscretions and abuse of bodily functions and in the unrestrained indulgences in the various vices and dissipations, social evils, slavery to the money god, the mental stress and worry incident to the mad desire for success and advanced position, socially and otherwise. Let it not be forgotten that there is a constant need among the poor and ignorant classes of intelligent direction in the line of general right living, healthy environment, steady employment, proper educational methods, wholesome and sufficient nourishment and the evil consequences of illegitimacy; in short, guidance along lines conducive to physical and moral well-being and mental self-control. Such general rules of living apply with equal force to that class of individuals who unfortunately begin life with a lack of the power of mental adjustment and an inability to get in harmony with the external world, which defectiveness makes them easy prey to genuine insanity.

If we would attain a broader knowledge of the causes, the nature and the prevention, the most enlightened treatment of insanity and the consequent results, there must be a more general awakening of interest and a greater sense of responsibility on the part of the members of the medical profession, legislators, the heads of families, school teachers, and all others who have an interest in the public welfare. Let the people understand that it is to prevention rather than cure that we must look to the stopping of the development and the increase of insanity and mental degeneracy and the consequent crowding of our institutions with ruined minds.

There needs also to be a more general interest and awakening on the part of the medical schools everywhere in the scientific teaching of psychology and psychiatry, which should constitute an important part of the college curriculum. Not only didactic lectures, but thorough clinical instruction, should be an essential part of every medical student's course, in order that they as the future family physicians may be not only better qualified to quickly recognize mental diseases in

the earliest stages, but be competent to treat such cases and to intelligently direct the family and the public in matters of prophylaxis.

* * * * *

Recognizing the cure of well-established insanity through medical agencies, we cannot boast of any special advance in recent years. Our pharmacopia does not yet contain any specifics for the disease, except perhaps that form associated with myxœdema. Dr. S. Weir Mitchell says: "Amid enormous gains in our art, we have sadly to confess the absolute standstill of the therapy of insanity."* Yet, as Peterson says, "each year witnesses some new fact gathered, some new problems solved, some new hypothesis advanced, some new line of study indicated." Under the teaching of master minds like Kraepelin and others, our conception of the insanities, their classification, their prognosis, their curability or incurability, we have an incentive to efforts and hopes of results unknown to our predecessors. So, let us press on with hope and courage. It is not only through the study of the physical condition, but by a study and an analysis of the mind, both in its normal and abnormal conditions, that the psychiatrist must seek a solution of the great problems with which we have to deal in prevention and cure. Indeed, ours is a many-sided work, in which are required co-operation and co-ordination of all the energies and forces of the profession and the laity, for the problems must be considered from the pathological, bacteriological, clinical, psychological, biological and the social points of view.

In the process of evolution of the State care and hospital treatment of the insane, many changes have taken place, till now the most ideal conditions are to be found at that institution which has its cottages or pavilions, its colony, its facilities for proper classification and its equipment for modern medical work, etc. Whatever the plan of construction may be, there should under no circumstances be over-crowding in any de-

*Weir Mitchell is a shining light in neurology, but his light does not shine over psychopathology and its treatment. Weir Mitchell is mistaken. He never had any practical knowledge of clinical psychiatry and is not qualified to speak authoritatively as an alienist on matters of psychiatry.—Ed.

partment. The distinguished Chairman of the Lunacy Commission of New York, Dr. Albert W. Ferris, an alienist of experience, truly says that "all efforts for the amelioration of the condition of the patients are much injured by over-crowding, which prevents proper classification, and provides for constant irritation of one patient by another, and serves to defeat, in a large measure, the ends and aims of management." Instead of housing the patients in a heterogeneous mass, as was once done, differentiation and adaptation have become essential features in a well-regulated and successfully conducted institution. In the first place, there should be a psychopathic or reception building for acute and recent cases. This department should be amply provided with all the equipment necessary to give the patients every advantage of medical examination and treatment, case-recording, nursing, hydrotherapy, dieting, etc.

Here the most scientific work is to be done at a time when the best results are looked for; consequently, no pains nor expense should be spared in efforts to restore the patient to mental health before chronicity or invalidism sets in. The hospital for the acute physically sick is next in importance and should be as well equipped as a first-class general hospital.

In institutions caring for both the non-epileptic insane and epileptic insane, the latter should be segregated in buildings apart from those for the former. A farm colony some distance from the main plant is the most desirable plan. By such separation both classes are the beneficiaries. Whether it is better that special institutions for epileptics provide for both the sane and the insane and demented epileptics, or for only the former, leaving the latter for the hospitals for the insane, is a matter about which there is yet a difference of opinion. My own view is that under the conditions existing in most of the States, the best results can be attained, and certainly with the least complication, by caring for all classes of epileptics in a separate institution—a colony, village or hospital—having its various departments suitable for the different classes of epileptic patients.

It is of vital importance that the tubercular patients be provided for and treated in a department all their own, located

preferably some distance from any other class of patients. One of your hospitals was among the first to adopt this progressive move. Five years ago the Virginia Institution, at Petersburg, opened a department for the tubercular. There should be no stop till every institution for the insane in this country is provided with means of giving the tubercular separate and efficient care and treatment along the most modern lines. This is simple justice to them as well as the other patients.

The farm colony for a large class of chronic cases that need little else than custodial care and supervision is of paramount importance, and no institution should be without such a department. In this connection, let me say that it is seldom that our State institutions are provided with sufficient farm and gardening lands. This is true at some of your institutions. There should be at least half an acre—one acre would not be excessive—to each patient. While a large number of patients, particularly the women, are occupied only in indoor employment, it is unquestionably true that out of doors is the best place for the greater proportion of the insane, hence ample farming land, fruit culture, gardening, flower culture, etc., are essential.

Many years ago medical superintendents of hospitals for the insane instituted, and have ever since held fast to, the doctrine of psychotherapy in its practical application in employment of one kind or other for the insane. Its importance cannot be too often urged, lest we become lukewarm in the application of so essential a therapeutic agent. Indeed, mental diversion, whether it be in amusement or manual labor, particularly in the open air, possesses inestimable value as a means of therapy. The insane, being subject to introspection and morbid thoughts, need both pleasant recreation and congenial occupation to dispel these and substitute therefor thoughts of a more healthy nature. "The best work is play, the best play is work." Work and play awaken interest and necessitate an objective instead of an introspective attitude of mind.

It is pleasing to know that this State is putting itself abreast of the progress of the times in establishing a separate

institution for the criminal and dangerous classes of the insane. The presence of such people in an ordinary institution works a decided hardship on the management and is a gross injustice to the innocent insane. They are frequently designing and vicious and a source of constant trouble and danger. They often exercise a bad influence over other patients and disturb the quiet discipline and the non-restraint policy usual in our institutions. The ordinary hospital for the insane has no adequate and safe way of keeping and treating them.

* * * * *

While every insane person, whether he has committed a crime or not, is entitled to humane treatment, all the insane cannot be cared for in the same manner.

You are thoroughly familiar with the progressive step which has led to the establishment in some of the States, notably New York, Michigan, Illinois, Pennsylvania and Maryland (soon to be established,) of psychopathic hospitals and clinics. Would that every State had such an institution, including an outdoor department, the general functions of which are research, educational and clinical work. It has been well-urged that the clinic should aspire to the most advanced scientific standards of treating those afflicted with insanity and mental disorders of varying degrees and types, but particularly those in the acute stage of development. Until psychopathic hospitals are established, the existing hospitals might conduct outdoor departments or free dispensaries, or at least receive, under certain conditions, voluntary patients who have incipient insanity or are on the verge of a mental breakdown. The purpose of this advance move should be to prevent the full development of insanity by treating it at a time when it is most amenable to treatment. The hospitals for the insane should throw their doors open, with proper legal restrictions, to the mentally sick, just as the general hospitals take the physically sick and surgical cases. If, however, psychopathic hospitals or receiving wards in connection with general hospitals were operated in the larger cities, or in convenient localities, a large number of cases in the early stages of insanity and the border line cases—the near-insane of the acute variety—could be successfully treated

there without having ever to be committed to a hospital for the insane. Voluntary commitment is a modern idea which should certainly become more universally adopted.

There is considerable force in what Peterson says: "An insane person is sick, and is a menace to himself and the public while thus sick. If we can restrain a person of his liberty without commitment papers when he has diphtheria and other contagious or infectious diseases, why have recourse to a judicial proceeding in emergency cases of insanity? If physicians unite in demanding the recognition of insanity as a disease this point will be gained."

There needs to be a wider interest awakened everywhere in the problems of psychiatry and in our institutions. One of the most fruitful ways of doing this is by bringing about a closer relationship and more active co-operation between the hospitals, the professional public, the medical schools and medical societies. Encourage in every possible way physicians to visit the institutions and become familiar with our difficulties, our problems, our efforts and what we are accomplishing. This would work a two-fold advantage—both the general practitioner and the hospital staff would be the beneficiaries. In a word, our hospitals should no longer be shut off, as it were, to themselves, but should be made the centers of education and knowledge in their respective localities in the field of psychiatry, mental hygiene, the prevention, diagnosis and treatment of insanity, etc. In an address on "How Can our Hospitals Promote a Practical Interest in Psychiatry among the Practitioners?" Meyer well says: "Our task will be, in the first place, to show that in psychiatry the physician has some opportunities for action, that they are profitable, and that even where his activity is restricted it will tell in a system of work in which most physicians can take an intelligent interest. The incentive must come from those who know and the task is ours. We must show that some of the difficulties are not insurmountable, and we must reduce the inevitable feeling of indifference which comes from the passing of the patient out of the physician's hands. Let us work on the hypothesis that it is our task to win the attention of the medical profession, to guide their opinions and, through theirs,

public opinion; and that we cannot achieve this by sermonizing, but by showing that we have some helps worth the attention of others."

There is no need whatever of the existence in the public mind of the insoluble mysticism regarding insanity and the supposed "horrors" of the "asylum," a view once so prevalent. The public and the medical profession may and should come and see that nothing is concealed from interested and intelligent visitors, but those who come from curiosity alone or to be amused by the misfortunes of the patients are not wanted. It is high time that the people everywhere were correcting old false conceptions of insanity and the "asylum" and getting in closer touch with our institutions, thereby giving encouragement to those who manage them.

Either at each hospital or at some central location—preferably at both—there should be properly equipped and scientifically conducted clinical and pathological laboratories for research work, in order to enlarge our knowledge of mental diseases. Indeed, original research and investigation should constitute a most prominent feature of our hospital system. As Dr. Kraepelin said years ago: "Scientific observation and experience form the firm foundation upon which the whole question of the care of the insane is based. * * * It has become more and more the duty of the State to foster scientific investigations in the hospitals for the insane." In connection with the pathological and clinical work, every hospital should have a well-selected library of standard medical works as well as journals, and the staff should have time enough from their routine duties to read and study them. As Dr. Osler says in his "*Aequanimitas*:" "To study the phenomena of disease without books, is to sail on uncharted seas. It is astonishing with how little reading a doctor may practice medicine, but it is not astonishing how badly he may do it."

* * * In most of the hospitals I have visited the medical and nursing staff are not large enough to carry on the scientific medical work and personal nursing as well as they should be, and to give to each patient that individual study and attention that should be given in every case, particularly

those in which the mental disease is of recent development. There should be at least one assistant to every 150 patients, and one nurse or attendant to every ten patients. Nor is the compensation usually enough to procure and retain long in the service well qualified people. The insane and epileptics are entitled to the best physicians—superintendent, and assistants—business officials and nurses the State can afford, and these should be paid salaries commensurate with the high and efficient service demanded.

As to the system of control and management of our hospitals, * * * much depends upon the character and efficiency and experience of, and interest taken in the work by those who constitute the personnel of the executive and administrative and medical forces.

* * *

In 1841, there was inaugurated in France, a philanthropic movement looking to the after-care and protection of patients who had been discharged from the asylums. In recent years a new impetus has been given the move in that country, the influence of which has spread to England, Switzerland, Japan and this country. The objects of the after-care committee are, as you know, to exercise a supervision over indigent patients who have been discharged or furloughed from the hospitals, and aid and direct them in whatever may be conducive to their welfare and in procuring employment for them, etc., in order to prevent as far as possible a relapse and to make them self-supporting. It would be in the interest of humanity and public economy if in every state there were organized and maintained societies or committees with the above objects in view. Particularly in New York this progressive movement has accomplished much good, impressing Dr. Richard Maban, a distinguished superintendent of the state, so favorably, that he brought the matter before the American Medico-Psychological Association in a very strong paper. Indeed, such a forward movement is of such vital importance, though it has not yet been appreciated in this country, that it seems that it is the duty of the State to give it its sanction by at least contributing financially to the maintenance of societies that undertake such public-spirited work.

But the functions of such committees should do more than after-care. It is of vital importance to look to the welfare and protection of the insane during that trying and often critical period pending and immediately following certification and commitment, and while awaiting to be transferred to a hospital. It is inhuman and decidedly detrimental to the insane to incarcerate them in jail, and we should protest vigorously against such criminal procedure. If, however, local condition, that is, absence of a hospital, or the violence of the patient, is such that the jail is the only recourse, there should be fitted up for their care a room where they would receive hospital instead of jail attention.

* * * From the highest to the lowest, all appointments should be made upon merit and qualification.

* * * It should be ever present in the minds of those who direct and control the policy of our institutions that all the officers and employees should be selected because of their capacity and adaptability for the hospital service.

* * *

Usually appropriations are not sufficient to meet all the pressing needs of the hospitals, much less procure all those modern improvements and equipments, and that high-grade service in every instance that should prevail in this age of advancement in the care and treatment of the insane and in the knowledge of mental diseases. Too often inadequate appropriations for maintenance, improvements and administrative purposes have been largely responsible for retardation in the State care and the cure of the insane. I have no patience with that narrow policy and benighted view, sometimes expressed or implied, that second rate men and a scanty allowance are good enough for the insane. Impress upon the legislatures and the public generally that the time has passed when our hospitals should be conducted as mere boarding houses for the simple, and physicians and nurses are merely keepers, and that we are breaking away from old therapeutic pessimism and have shown that insanity is often curable or preventable, and that we have entered a field of medical progressiveness that, if allowed to continue, will result in great benefit to the entire race. Let us continue to stand for higher

and better things. * * * Let us bear in mind that every day and all day long the process goes on, a death of error, a development of truth. In the words of the late Grover Cleveland, "Take hope, for we are steadily rising to planes higher than we have yet known."*

*We regret that want of space compels abridgment, but we present in this timely and valuable paper all of its salient points and most of its force.—Ed.

SCOPE OF DEVELOPMENTAL PATHOLOGY.*

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WHAT is developmental pathology? Pathology is often medically and carelessly used to signify either pathologic anatomy or purely morbid processes or, at best, disease physiology. As Virchow pointed out nearly two decades ago, "a transformation, a metaplasia, a change from one species into another—whether in individual animals or plants, or individuals or their tissues—cannot take place without anomaly; for if no anomaly appears this new departure is impossible. The physiological norm hitherto subsisting is changed and we cannot well call that anything else but an anomaly. But in the old days an anomaly was called pathos and in this sense every departure from the norm is for me a pathological event. If we ascertained such a pathological event, we are further led to investigate what pathos was the special cause of it. This cause may be, for example, an external force, or a chemical substance, or a physical agent, producing in the normal condition of the body a change—an anomaly (pathos). This can become hereditary under some circumstances and then become the foundation for certain small hereditary characters which are propagated in a family; in themselves they belong to pathology, even although they produce no injury. For I must remark that pathological does not mean harmful; it does not indicate disease; disease in Greek is *nosos* and it is *nosology* that is concerned with disease, The pathological under such circumstances can be advantageous."†

*Read before the Chicago Academy of Medicine, November 26, 1909.

†Correspondenz-blatt von Deutsch Gesellschaft für Anthropologie, 1894.

As introduction of new functions or their potentialities into the organism is a constant phase of life from conception until the completion of maturity at twenty-five, factors tending to anomaly and requiring continual readjustment to the organism are constantly present. These adjustments require not only entrance of new factors but also removal of previously dominant factors. These factors involve not merely ontogeny or the development of the individual but likewise phylogeny or the development of the race. The last in the metazoa or many celled animals, particularly among the vertebrates, is subordinated to the first. While the central nervous system is a late acquirement, it appears in ontogeny long before it is required in phylogeny. The sympathetic system reverses this but its potentialities are early present in the metameric phase, mimicking the state of protozoa, like the amoeba. This state of things produces, as Roux* has shown, a struggle for existence between the organs since the supply of assimilable nutriment is limited. The higher type depends, to some extent, on the initial velocity given it by heredity, aided by maternal environment during ovulation. This initial velocity implies proper balance between the developing and disappearing structures in embryogeny, particularly since this determines proper balance in initial velocity during the post-natal periods of stress.†

Developmental pathology, while rather extensively considered in surgery, in the domain of tumors, of orthopedics and also in connection with abnormalities of the liver and also of the bones, so far as cervical ribs are concerned, has not received the attention which its relations to the etiologic moment of disease and disorder merit. The congenital states and their post-congenital possibilities are, to a very limited degree, recognized in the embryonic and reversionary explanations of cancer and malignant growth. To a still more limited degree, developmental pathology is recognized in hematology, since pernicious anaemia is by leading pathologists considered a reversion to embryogenic states. The alienists‡ have long regarded many of the psychoses as

*Kampf der Theil im Organismus.

†Kiernan, J. G. *Medicine*, 1901.

‡Spitzka, E. C. *Somatic Etiology of Insanity*.

expressions of arrested cerebral development or of its post-congenital possibilities. The same is true of the so-called hereditary neuroses and psychoses. The other organ states have been less regarded, although both the gynecologists and the genito-urinary surgeons have shown tendencies to take the developmental pathology of these into account in dealing with the origin and consequences of morbid conditions.

The two great phases of developmental pathology have, however, not been used to the degree they should be as guides in the analysis of symptoms and consequences. While conditions in reversion have been considered to some extent, those occurring in phylogeny (race development) have not been separated from those occurring in ontogeny (development of the individual man). Ontogeny does not repeat all the steps of phylogeny, but assumes the essential characters of the race rather quickly. Very frequently the lower phases of phylogeny are, therefore, represented by potentialities capable of development, rather than by the structures themselves.*

Developmental pathology, then, may be regarded as the domain of pathology which deals with departures of structures and organs from the normal along the line of arrests of fetal evolution, wither in structure or in biochemic states underlying functions or potentialities of development at given periods of growth. Atrophies, with or without resultant hypertrophies, and vice versa, are underlain by its laws.

The general trend has resulted in a working hypothesis compatible with all pathologic phenomena of all the structures of the body, but more especially of the head, face, nose, jaws and teeth since they are more easily recognized. With this as a guide, the student can readily study the pathologic details of any structure or the body.

To comprehend the pathology of these structures, the laws of phylogeny must be understood. Phylogeny is that process by which an individual or structure is transformed

*DeMoor, Evolution by Atrophy.

from a lower to a higher type. Man is still undergoing evolution. His structures are continually changing to suit environment. The master hand is adding a little here and taking away a little there, to adjust him to new conditions as they arise in the world. This process, which has been going on ever since man appeared, is still in progress.

Degeneration is a gradual decline of the structure in type. While the changes pertaining to evolution are in progress, man suffers more or less from his ignorance of the laws governing them, the proper understanding and strict observance of which would banish disease from the earth. His ignorance and consequent failure to readjust himself to changing conditions clog the wheels of evolutionary progress and bring about suffering and misery. Not only so, but the progress of evolutionary changes, various extrinsic obstacles are placed in his way, which not only hinder progress but cause degeneration in type of his structures. These obstacles consist in parental excesses, resulting in neurasthenia, intrauterine infections from parent to fetus and eruptive diseases of the child.

In man's ontogeny, phylogeny and degeneration go hand in hand. An organ or structure remains with man so long as it develops or aids in the formation of a new organ. The brain is an apt illustration. Degeneration of an organ or group of organs consists in a gradual restriction or disuse of structures, and their final obliteration or disappearance. The muscles of the ear, the vermiform appendix, the little toe, the false ribs, the pineal eye and especially the face, including the nose, jaws and teeth are peculiarly involved in this process.

Progression can take place in the struggle for existence only through general development at the expense of disused organs. The structures of man are influenced greatly by environment. If he remain in a savage condition generation after generation, his surroundings being the same, he will retain, as a rule, certain fixed conditions of structure. Thus his brain will not develop, but owing to the retention of the primitive use of his jaws in masticating coarse food, etc., these will retain the size and strength of primitive life.

On the other hand, if he abandon the savage life, develop his brain, and is not forced to masticate food, his jaws and teeth atrophy. A marked example of this in this country is the evolution of the negro in the past two hundred and fifty years from a dolichocephalic to a mesaticephalic head, and from a prognathous to an orthognathous jaw. Man, in his development from the lowest vertebrate, passes through all the vertebrate stages from fish and reptile to bird and mammal.

In his flight from cell to fully developed compound animal, man at the present period of his evolution has, as a result of a loss in explosive force, developed a nervous system. How well he accomplishes this development depends upon brain health. The brain of man develops first to preside over the development of the other structures. If the brain be normal the structures of the body will develop normal, on the other hand, if from any cause the brain is abnormally developed, unstable or defective, the structures of the body become abnormal. When arrests of the brain occur different classes of degenerates result.

The structures of the nose and cavities of the face display much abnormality because of excessive and arrested development due to their transitory nature and to an unstable nervous system.

In the development of man from the primitive cell, periods of stress constituting new environment occur. Those which occur during development are called periods of evolution and those after maturity, periods of involution. At these periods of stress, development of the nervous system may be strained, producing arrests of development or degeneration.

Structures undergoing arrests or degeneration are, because of lessened blood supply, more liable to disease than structures which are evolving higher. Marked illustrations of this may be found in irregularities of the teeth and disharmony in jaw development where the teeth are not being lost fast enough for the receding jaws. Interstitial gingivitis and decay are natural methods of hastening the process.

Arrests which occur at any period along the line of

development account for all the so-called deformities of the body, which are reversions simulating some features of the lower animals, characteristic of fetal stages through which man has passed. No structures of the body are so prone to these arrests or degenerations as the face, nose, jaws and teeth, since they are continuous in the line of evolution and are governed by the law of economy of growth in the struggle for existence between organs. This struggle for existence between organs takes place among the animals as well as man. * Wild animals in captivity and other animals through domestication (change of environment and food) have changes in structures similar to that of man.

States normal in lower animals here become abnormal in man.* This is of necessity modified by the increasing complexity of ontogeny or individual development in man as affecting phylogeny or race development. Not only are structures affected by these elements, but functions are likewise so modified without underlying structural change. Uric acid excretion, for example, normal in the sauropsidae (birds and reptiles) has become abnormal in man. Its secretion by mammals is, as Fothergill shows, an abnormality with serious consequences. What is true of uric acid is likewise true of other products of suboxidation and imperfect elimination like indican and excessive acid.† The presence of these clog, like clinkers, the working of these structures and act in a peculiar vicious circle to increase the conditions which produce them.

Biological investigation shows that in the evolution of organs certain parts may disappear completely, but also that in the evolution of organisms certain organs may also disappear. This last phenomenon is most common in embryological development, when it is known as ontological abbreviation. Sometimes it is the adult stage that is suppressed, this being possible by what is called paedogenesis, a precocious appearance and ripening of the sexual organs.

Sometimes a degenerative transformation becomes still more complete and wonderful; not only may a larval stage

*Bland Sutton, *Evolution and Disease*.

†Therapeutics,

become completely suppressed, but a multicellular organism may even lose its power of dying. It is known that the simplest forms of life are practically immortal; when a microbe-like micrococcus divides nothing dies, and throughout the whole series of successive divisions the primitive life is preserved. On the other hand, in case of higher animals such as man there are both mortal somatic cells and reproductive cells which, by means of conjugation, become practically immortal. The mortality of the somatic cells is evidently an acquisition, an advantage fixed by natural selection; but there exists multicellular organisms evidently derived from creatures which had acquired the division into mortal somatic and immortal reproductive cells and which have lost it since. All the cells of their body are able to avoid death by conjugation. This occurs in many conjugate algae like *spirogyra* and in some of the *volvocineae*. (*Stephanosphaera*, *Eudorina*.)*

Plainly then, the further one examines the facts the more enlarged becomes the conception of degenerative evolution. It is not confined to unusual, abnormal or pathological cases. Degeneration is not an accident in evolution; it is the obverse of progressive evolution and the necessary complement of every transformation, whether anatomical or social.

Whatever transformation may be studied, it will be found that change is always accompanied by an elimination of some parts and that in the interests of the organism as a whole these useless parts gradually degenerate. When a whole organization begins to undergo retrogressive evolution and to decay, it is frequently in the interests of some still larger organization. All progress implies necessary eliminations. In the domain of society, those who are victims and who from birth, education, or interests, attach themselves to the decaying institutions, naturally see only the degenerative side of the change; but those who regard the process as a whole and do not concentrate their attention upon the injured interests and individual sufferings will see the other side of the movement.

*De Moor—Evolution by Atrophy.

When a social organism is degenerating there is considerable opposition to its complete disappearance and so, as Houzeau has said, it is to be expected that living and superior civilizations drag behind them a trail of debris from dead civilizations.

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TRANSPLANTATION OF THE SPINAL GANGLION INTO THE BRAIN. *

BY S. WALTER RANSON, M. D., Ph. D.

CHICAGO.

AN attempt has been made by a number of investigators to transplant brain tissue, but with unsatisfactory results because of the difficulty of handling the friable cerebral cortex in the very thin slices which would be required for a successful graft. Thompson (*New York Med. J.* 1890) reports the "successful transplantation" of brain tissue, but sufficient time had not elapsed from the time of transplantation to that of the autopsy to allow one to assume that the graft would not undergo absorption.

After the experiments to be described here had been completed it was found that the work had been anticipated by Marinesco and Bethe. Marinesco (*Cont. rend. Acad. d. sc. Par.* 1907) transplanted both spinal and sympathetic ganglia along the course of the sciatic nerve. He worked with dogs and a number of other animals, but always adhered to the principle of auto-transplantation. The cells in the transplanted ganglia were rapidly altered, those at the periphery of the ganglion surviving longer than those in the interior. Some cells near the periphery of the ganglion were still present in a graft that had remained in place twenty-four days. Bethe (*Allgemeine Anatomie und Physiologie des Nervensystems* S. 226) found a few normal cells in a ganglion which had been placed at the side of the sciatic nerve six months before.

In my work white rats were used, two for each experiment. The animal to receive the graft was a month old. Its head was prepared and a small strip of bone removed parallel to the great longitudinal sinus and an incision made in the

*Northwestern University Medical School Bull., Dec., 1909.

cerebral cortex in line with the bone defect. A warm pack was then placed over the wound and the second cervical ganglion removed from the neck of a rat one week old. The ganglion was grasped with fine forceps by the short stretch of attached nerve and inserted into the brain wound in such a way that the nerve was deepest in the wound, and the ganglion just beneath the cortex.

Two animals were allowed to live ten days and one two months. The brains from the first two animals were examined for the site of the graft and this with a piece of the surrounding cortex was excised. Paraffin sections from these were stained with toluidin blue and erythrosin. The third brain was prepared by the Pal-Weigert method and counterstained with Upson's carmine.

The sections from the brain of Rat I containing a graft of ten days' standing shows the spinal ganglion imbedded in the substantia alba just dorsal to the radiations of the corpus callosum. It is easily recognized by the abundance of connective tissue and by the presence of the round or polygonal cells characteristic of the spinal ganglion. These are arranged in the shape of a horseshoe, two or three cells deep, around the periphery of the ganglion on the side toward the corpus callosum. All nerve cells have disappeared from the interior of the ganglion. The surviving cells are in various stages of chromatolysis, but the majority of the cells show only partial solution of the tigroid masses. These cells are much swollen and their nuclei are excentric. No small nerve cells can be seen. These are more susceptible to injury than the larger cells and rapidly disappear from the transplanted ganglia.

Substantially the same conditions are to be seen in Rat II, also representing a ten-day graft.

The spinal ganglion which was allowed to remain in the brain for two months is shown in Figures I and II, of which the former shows the general location of the graft and the latter represents the remains of the ganglion. The graft (Fig. I, b.) was not as deeply placed as the others, but was imbedded in the cortex near the great longitudinal fissure (a), and covered over by a proliferation of the pia mater. The ganglion is much decreased in size and surrounded by scar tissue. It contains

only a small fraction of the number of cells to be found in a normal ganglion, but these few cells are of normal appearance, so far as can be ascertained by the carmine stain (Fig. II, a.). The shape and size of the cell body, the position, size and contour of the nucleus and the absence of any proliferation of the nuclei of their capsules justify one in assuming that these cells are not undergoing degeneration but have survived the transplantation and would continue to exist indefinitely in their new position.

A few medullated nerve fibers (Fig. II, b.) can be seen in the ganglion. These are gathered together in a bundle which can be traced for some distance in the scar when a series of these sections are studied. It is not possible to say whether these are regenerated fibers or fibers which have persisted from the time of transplantation of the ganglion.

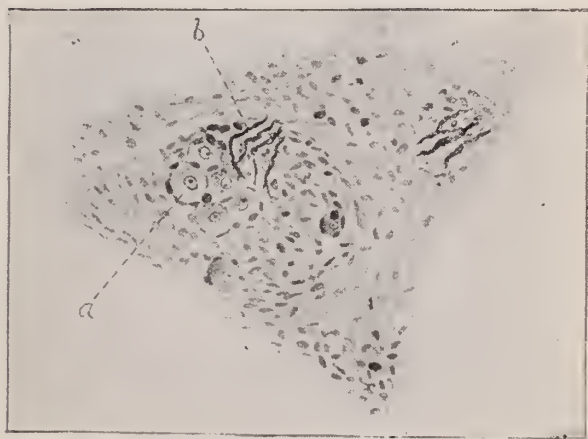


Fig. I. Drawn from a Frontal Section of the Brain of a White Rat into which a Spinal Ganglion Had Been Grafted. (a) Great Longitudinal Fissure; (b) Grafted Ganglion. Pal-Weigert Stain.

Fig. II. Drawing of Area b, Fig. I. More Highly Magnified. (a) Nerve Cells; (b) Medullated Nerve Fibres.

NEURO-RECTAL AND RECTO-NEURAL RELATIONS IN SURGERY.*

A Review Reference.

BY THE EDITOR.

A DECADE of somewhat extensive experience in the field of practical surgery and several additional decades in neurologic and psychiatric practice should qualify one for obtruding such neuro-clinical convictions upon surgical attention as will appear in the present communication.

The growing appreciation on the part of the wielders of the scalpel of the neurological aspects and neural relations in the human organism to surgical practice is a source of professional gratification to one whose vocation it is to rightly consider the nervous system in its relation to disease and wounds and to discover its trophic and atrophic influence in shock and surgical result, *i. e.*, rebuilding and violence-sustaining or defying and defying its metabolic wrecking.

As a neurologist, built upon an extensive surgical and no mean degree of medical experience, I note with peculiar interest among the many good contributions to an excellent and up to date surgical magazine, after mention of that fine clinical contribution of Hitschleron, "The Conservation of the Middle Terminate," interesting and instructing to all neurologists, and wish to address myself for commendation, not to mention the other splendid articles of the December number of

*Apropos of the present subject is an interesting orthopaedic surgery contribution by W. O. Plimpton, Professor of Surgery, New York Post Graduate Medical School, to the *Journal of the A. M. A.* on "Some Points of Contact Between Neurology and Orthopaedic Surgery" and there are many others to be found, if rightly looked for.

the *American Journal of Surgery*, the paper "On the Relation of Rectal Diseases to the General Nervous System," by Laplace, of the Medico Chirurgical College of Philadelphia—an article which has won a place with big capitals in the neurological heart.

The caption might well and truly be reversed to read "The Relation of the Nervous System to Rectal Disease" and fit a neurological audience, if that audience were possessed of the complete sort of knowledge of the organism which all thorough neurologists should have, for a neurologist should know and consider the entire organism in its anatomical relations, from the ganglion of Ribes and cerebral cortex to the ganglion impar and from the territory and viscera of vagus and pudic nerve innervation to the prostate gland, pampiniform plexus and rectal and perineal territory of the human anatomy.

It is indeed a refreshing neurological shower to see and hear and feel a modern surgeon thus neurologically discourse as follows in a clinical lecture:

"The cérebro-spinal system gives the muscles of the rectum branches from the sacral plexus while the superficial perineal, a branch of the pubic, supplies the levator ani and the skin in front of the anus. The inferior hemorrhoidal, sometimes existing independently of the sacral plexus, supplies the lower end of the rectum and anus. The pudic is controlled by the same part of the cord as the sciatic. Hence the irritation from a fissure or ulcer located within the anus may be transferred down the limbs to some distant parts.

"For the body to maintain itself in a fair state of health, not only must the various glands and blood-making organs have their physiological integrity, but also the serum must retain its opsonin-producing power and the polynuclear leucocytes should abound, to digest easily the invading organism weakened by the opsonin. For this auto-protective system to remain unimpaired it is necessary that the sympathetic nervous system, as well as the cerebro-spinal system, continue in a normal state.

"My object is to briefly show the intimate connection of the sigmoid and rectum with the sympathetic and cerebro-spinal nervous system; how by various rectal disorders the

nervous system becomes thoroughly demoralized, predisposing the patient to many reflex troubles and up by other nerve channels.

"It is through the sympathetic system, however, that a more profound impression is produced upon the general economy from the rectum. The sympathetic nerves in this region come from the mesenteric and hypogastric plexuses; it also receives branches from the lumbar and sacral plexuses."

This is good neuro-surgical reasoning and it is likewise soundly physiological.

"From this intimate connection of the rectum with the sympathetic it follows that any constant irritation in this region is betrayed to the sympathetic system as a symptom which I have called the pain of the sympathetic, that is, a constant degree of low shock, commonly called a condition of general depression. During this state, in reality a minor condition of shock, all the functions of the body are lowered. This condition, obscure in itself, has been sometimes diagnosed as neurasthenia, a name often too handy to cover the symptoms resulting from an overlooked insult to the sympathetic system." Nevertheless it is surgical neurasthenia.

We emphasize this because of its neuro-surgical importance and because all surgeons do not so reason tho' it would be better for their patients if they all and always did.

"I have also found hemorrhoids associated with various forms of malignant growths. Of course, we know that any part of the body that is constantly irritated is especially prone to malignant degeneration, the constant irritation predisposing the spot to cancerous infection."

"Another factor comes from the constant depression of the sympathetic, which we know is a predisposing cause for cancer elsewhere in the body."

The neurologist and psychiatrist can verify all this from his special line of experience. In reference to the influence of a rectal fistula an experience concerning the same made forceful and lasting impression on the writer himself in the early part of his professional career as a surgeon, in the person of a young, extremely melancholic and nostalgic soldier in the writer's hospital at De Soto, Mo. Finding a blind rectal fistula,

slitting open the same and healing it from the bottom, the young man improved and recovered after the operation, *pari passu* with the cure of the fistula. This experience led the writer ever after to look upon cerebrology and proctology as not always so far apart as sometimes appears and in his periscope of the man, preliminary to prescribing, to never overlook the rectum and perineal region. It is wise for both neurologist and rectal surgeon to make a survey of every aspect of his patient, to examine as well as treat him all over.

To this the neurologist would but add how a demoralized, inadequately entoned nervous mechanism, (vagus and splanchnic sympathetic) permits and produces intestinal atony and atonic constipation, etc.

This surgeon talks as a neurologist might well discuss the subject of adneurial or extraneural conditions influencing interneural function and neuro-physical relations.

Harriman's career of strenuous overstrain is said to have ended also in cancer after the shock of being called an undesirable citizen and the exposure of his Chicago and Alton deal.

This reference to the depression of the sympathetic predisposing to cancer, certainly has a physio-clinical foundation, as the writer in the *Alienist and Neurologist*, his own magazine, suggested many years ago and later, referring to the death of General Grant after the Ward Company failure of which Grant was a member. This failure and the newspaper calumnious references to it at the time overwhelmed the great general and good president with mental mortification and chagrin, nerve center depression and melancholy. The cases of Napoleon after Moscow, Waterloo and St. Helena and of Senator Benton, of Missouri, and other great men succumbing to cancer after mental shock, reverse of fortune and failure, have been elsewhere cited by the writer in support of neuropathic depression relations to cancer.

An intestinal neuratony, a neurasthenia of bowel innervation, often precedes as well as follows the rectal absorption toxhemias, of which Laplace so justly speaks and so correctly observes. The enteroptoses, the festooning, the prolapse or by whatever other name called, the constipated and

torpid rectum and liver constipation and states of atony which from minus nerve influence both promote intestinal autotoxicity and proceed therefrom. There is here mutual reacting influence. The wise clinician, surgical or inner medical, will look over the entire patient even though the doctor be a neurologist or an alienist and treat the patient accordingly. He will find much more than has been up to date considered and will find, more often than is generally suspected, more or less initial grave neuratony at fault in connection with the inception and progress of grave organic and functional departures from normal, in organs and localities not ordinarily classed as nervous.

If it were permissible to coin such a term for the literature and practice of surgery I would say psychic antisepsis is quite as essential to surgery, in many of its aspects, as ordinary septic precaution, especially in gynecological surgery. The quick operation immediately after the major shock of a railway accident, before sensibility and consciousness returns and the secondary shock depression or slow shock sequences set in with returned sensory perceptions, once commended itself to me in my earlier surgeon days. But this is a subject for further consideration, in fact the psychiatry and neuriatry of surgical practice is a vast clinical field not yet fully surveyed. This may be regarded as butting in from one who has not done anything in surgery except some brain work in over several decades of time. But once a surgeon always a surgeon—in thought, if not in practice.

“THE EMMANUEL MOVEMENT AND ITS AFFINITIES.”

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San Francisco.

AT the time that I wrote the article published in the *Alienist and Neurologist* for August, entitled “The Emmanuel Movement and Its Affinities,” I had no other aim in view than to draw the attention of the medical profession to that side of the healing art, which is not to be despised, though too much neglected at the present time: viz. the effect of mentality on the many functions of our bodies in health and disease.

I had observed that the Emmanuelists claimed that they were merely seeking, in various forms, to aid the regular medical profession in its recognized established field of usefulness and were not in any way usurping its prerogatives or intruding upon its domain. This seemed to me an eminently proper position to take, and assuming that this ideal prevailed throughout, I sought to discuss the matter as dispassionately, broadly and plainly as possible, and really more in the light of one seeking information rather than of one obtruding any ideas of his own on his professional brethren.

I was not aware then that the Emmanuelists had published any work explanatory of their tenets and doctrines, and hence in my ignorance, I had given them much more credit—indirectly at least—than I can now, with more enlightenment as to the facts.

Their compilation, published by Doctors Worcester, McComb and Coriat, entitled “Religion and Medicine,” comes no doubt more as a sort of “declaration of principles” rather than as a common-place text book on any branch of medical science.

It is true that the subject of medicine affords an unlimited field for the views, opinions and scribblings of all the talents, and hence we are pestered with a mass of inane vapid verbiage, not surpassed even in the lurid pages of the dime novel of the period. This irrepressible plague of medical literature, from the manufacturing druggists, persistent announcements of some marvelous new panacea, and all its attributes, to the attenuated repetitions spread over new and ponderous volumes of medical literature, constantly laid before us, is quite enough to discourage the conscientious student in his chosen calling; and is also sufficient to deter *humane* men, with opinions, from obtruding them on professional notice.

Alluding to the numerous effusions of the would-be poets of his time, Horace, in his inimitable epistle to the Pisos, exclaimed "Scribimus indocti doctique poemata passim," but how insignificant his cause for complaint must have been, compared with ours of this period, with our free cheap press and unlimited license to publish the true and the false, the pure and the impure alike.

Mrs. Eddy and her cohorts are altogether outside the pale of medicine and should not be discussed seriously in our leading medical journals, unless to show how far the ravings of a lunatic or the adroit cunning of a knave may lead the many. Christian Science is now a religion openly practiced and adopted, and therefore should be left in the hands of Churchmen, Sociologists and possibly Legislators. Not so with the Emmanuelists. Their efforts are ostensibly to aid legitimate medicine, as they proclaim, but in reality to usurp the doctors' functions in all diseases.

Their remarkable work, entitled "Religion and Medicine" written by a Doctor of Divinity, a Doctor of Philosophy and a Doctor of Medicine, covertly labors in this direction, whilst unstintingly proclaiming the contrary in its pages. This remarkably adacious publication contains some twenty different chapters, each one a crude reproduction of the other, and all summed up together, leave as far as it can be done, only a very malodorous impression on the mind of the reader.

The first chapter on "The Sub-conscious Mind" seems to be as incoherent as the most vague and incompatible elements

of an ordinary dream, and finally settles down to the contradictory statement of the "*Sub-conscious elements in mind.*" The subject of consciousness and sub-consciousness and unconsciousness are blended in a manner that would do credit to one who heard the names, but nowise understood their meaning.

At the outset it is better to proclaim that these conditions are well known, not only to the medical man, but to all people of normal mind. For instance every human being knows that he or she has a mind, and is aware of the presence or absence of certain things or conditions and surroundings, past and present, in a common-place way. This is consciousness.

Each one knows that he or she can do one thing whilst thinking of another, as the pianist who can play very well whilst engaged in conversation with some one near; the wash-woman who sings as she washes, or the oarsman who guides his boat whilst he tells stories to the tourists. These are acts of "sub-consciousness." This should be called the dual action of the mind, which every one possesses, and according to the attention and requirement, either side can be made subordinate to the other. Again all people know that they dream at certain times and those dreams are completely disconnected with any thing occurring to them in their conscious state. Some learn of their conduct through another party, as in all actions of somnambulism, sleep-talking and sleep-walking. These are acts of an automatic or *unconscious nature*. The profound delirium of one suffering from any form of blood poisoning, is the most pronounced illustration of this condition; as is also the condition of a person under any anæsthetic.

In the chapter on the "Sub-conscious Mind" of the Emmanuelists a great effort is put forth to prove that such a thing exists, whilst every intelligent person knows it requires no argument whatever. To illustrate, however, the incoherent jumble of ideas running through this work, we have as proof of the existence of the sub-conscious condition: "A trout elects to lie in a dark shady pool, and he quickly takes on sombre hues in harmony with his environment. He passes out into the sunny ripples and becomes bright again. I have

seen old fishermen who could tell the very stream from which a string of bass had been caught by the color of the fish. The physiological means by which such changes are effected pass our comprehension; and the greatest physiologists can give no account of them, except that they are effected through the eye, as blind fishes are incapable of such transformation."

In this direction other fish have much greater potency than the trout. The physiologist cannot at present explain this matter, neither can he explain how a carrot can become beef through the stomach of an ox. The above quotation is a perfect summary of all that runs through this remarkable publication. The very fact that the clear sighted fish is able to accomplish this feat and the blind one is unable to do so, would prove to all ordinary minds that this must be a *conscious* act, and not a sub-conscious, or an un-conscious one. Given to us the power which we do not possess of being able to protect ourselves from danger in a similar manner, would we not in our perfect *consciousness*, readily avail of the same method of protection, that our friend, the trout, does in this case? It is to be presumed that the writers have forgotten the many endowments given to the lower animals, that we do not possess, one of which is the above in the fish family; another of which is the sense of direction, well observed in the homing pigeon, and even in the ants as reported by Sir John Lubbock, another is the sense or knowledge of danger well observed in horses when driving through our streets. How readily they avoid all subways with a light covering over them, though absolutely without danger. How nervous they become in the neighborhood of unseen carnivorous animals, or poisonous reptiles in the country. The most pronounced illustration of all these attributes is the quality that all the herbivorous animals possess, of being able to discriminate between the poisonous and non-poisonous plants on which they live. It is quite evident that their sense of smell is a very different endowment from ours, and as we perceive a foul odor and consequently avoid contact with it in our perfectly conservative reasoning, so they *reason* also conservatively that certain effluvia or emanations from plants are to be avoided.

Another remarkable illustration of these philosophers in the chapter on the sub-conscious mind reads "In the course of our lives most of us are confronted with tasks or energies which require strength, courage and resourcefulness in excess of our ordinary powers, or we undergo experiences which without *conscious effort* on our part transform us, shatter the habits of a life time and lift us to a higher plane of being. A woman is engaged in the ordinary duties of her vocation with just sufficient strength for daily needs, when an unusual demand is made upon her, perhaps some of her children are ill at the same time. For weeks she seldom undresses, she snatches her food as best she can, she sleeps but little, but night and day is engaged in the hardest kind of work, which taxes her moral nature even more than her physical; yet she does not break down and she performs tasks which without the stimulus of love and responsibility would be impossible."

In a work nominally intended to aid medicine it is difficult to control one's temper on reading such incoherent nonsense as this, when discussing the "Unconscious Mind." Does not the sense of responsibility alone imply consciousness? Does it not abundantly prove that it is the increased effort of the WILL, which accomplishes the marvels alluded to? What are we to think of the great worthies of history, the men who altered the face of nature, physical and moral? Were they too acting without consciousness? Were their achievements the result of a sub-conscious mind? Grant's, Sherman's, Sheridan's plans of campaign were all undertaken and accomplished while they themselves were in a state of sub-consciousness, and they must have been rudely awakened from their reveries, only when the country and the nations applauded their efforts! In what a profound state of "sub-consciousness," the first Napoleon must have spent his life, and Von Moltke and Bismarck must have been completely hypnotized when their cohorts changed the map of Europe!

It is not too much to say that the three philosophers who have sent out to the world this marvelous compilation, entitled "Religion and Medicine," have no conception whatever of the term "sub-conscious," or if they have, in their desire to publish a bewildering stream of words covering some four

hundred pages, they carefully conceal such knowledge from the intelligent reader.

We might stop here and exclaim with the Latin poet, "*Ex uno disce omnes*," for this unwholesome stuff is too much with which to tax medical readers, but as this "declaration of principles" is not a common work of medicine, exploiting the views of some half witted medical writer, but a new departure hatched and fledged and amplified in the bosom of the Great Episcopalian Church, we cannot afford to treat it so trivially. Almost the very next paragraph to the fish stories is still more interesting.

"In this connection I should like to call attention to sexual love and attraction. Schopenhauer recognizes the instinctive, *sub-conscious* basis of genuine love and passion that distinguishes it sharply from friendship which is based on rational consideration. . . . At last Schopenhauer answers this question by affirming that the Universal Unconscious Mind perceives that these two persons are best adapted to produce a perfect offspring and the Will which is fundamental to the universe impels them to this act."

Thus a Doctor of Divinity of a Christian Church is our authority for the statement that a Universal Unconscious Mind governs this universe of ours so that the great Creator Himself after all is unconscious of His work.

What appalling and preposterous blasphemy this would be from the most aggressive of the Reds and how much greater from a Christian minister! If accepted would it not of itself remove all traces of responsibility from every human being; the result as he is of a creator possessed only of an "unconscious mind," and that the Will which is fundamental to the universe impels and governs all his actions. "O Tempora, O Mores!"

In Heaven's name why blame or punish the multitude of carnivorous humans who slay and torture their brethren all over the world, why censure the wretched divorcees which are now claimed by sociologists to be the greatest disgrace of the nation? But, alas, for this incoherent theory, the divorcees are themselves its very strongest refutation. "*Two* human beings differentiated from the rest of mankind, seek each other

to produce between them a perfect human being, as the Universal Unconscious Mind *perceives* their fitness." It is not very clear how an unconscious mind can perceive anything, but granting the absurd proposition, what about the much abused Mormons and the other more numerous polygamists of the divorce courts?

It merely comes to this, that a Christian minister, who is presumed to repeat daily, "I believe in God the Father Almighty, the Creator of Heaven and earth, etc.," is after all only addressing a "Universal Unconscious Mind."

Are not those plague germs of organized society, the anarchists, commendable and consistent compared with these hypocritical and incoherent scribblers, posing in the garb of Christian ministers, vainly striving to maintain a medical fad, without having acquired the very first principles of science and being utterly incapable of comprehending the subject?

To pursue anything like a definite investigation of this one chapter of this unwholesome book would entail more waste of time than the readers of the medical journals should be afflicted with. From what I have said it is quite evident that if accepted it contains a justification for all the crimes that human beings can commit.

Again there is an inharmonious blending of hysteria and hypnotism, of fleshly passions and spiritual evolution, that must lead one into a labyrinth of unreason, found only in the refractory words of our asylums. Just a few more words. Thus: "The elements of truths in Charcot's statement is that hysteria is a disease of the sub-conscious mind." Charcot states nothing of this kind and if such an idea can be gathered from his published works it would be as valueless as if emanating from the Emmanuelists themselves. Hysteria is essentially a disease of the *will*, of the conscious human *will*, a disease in which the will controls more functions of the body than is possible under normal conditions, hence I have long since called it "Patholesia," which means morbid will.

Every person suffering from this disease knows very well what she or he is about; there is no unconscious mind connected with it. It is not possible that the Emmanuelists deny that the will can be educated. I do not refer to what they

call unconscious will. In point of fact will and "unconsciousness," are incompatible terms. But if they deny this proposition, all they have to do to be convinced of the contrary is to look around. How often do we hear "Mr. S——was terribly addicted to such and such vices, he saw the folly of his way, he made up his mind to correct them and see where he now is." 'He made up his mind' is simply another expression to the effect that he strained and trained his will to accomplish what he desired. Nothing of this nature can exist either in the sub-conscious or un-conscious condition of our lives. I would not tax the medical reader with any further notice of this unjustifiable publication, because if stripped of all its fine plumage, and dying swan like music, the dreary fact remains that in this new movement we have to deal with just as trite, and patent, and vulgar, a pretence as any of the manifold vicious things daily obtruded on our notice, either in the advertising columns of the press, the city bill-boards or those thrown at our door steps.

The vice is even more flagrant in consequence of its manifest hypocrisy and its covertly traducing and belittling the Founder of Christianity throughout its incoherent pages. He who said, "I am the equal of the Father who sent me," and again, "All power in Heaven and Earth is given unto me," in this delectable work published by a Christian minister, is made to appear on no higher a plane than the charlatan Mesmer and his confreres. The following sentence may possibly explain some of the causes leading up to the foundation of this cult. "I venture to address this appeal to the scholarly among the friends of Christ who see and deplore the present condition of his Church. Again and again in the long history of our religion, the Church has wandered from the living way, the way her founder not merely commanded, but which he declared himself to be. She has been encrusted by superstition, seduced by worldly and carnal policy, corrupted by sensuality, withered by rationalism and at times she has borne few of the lineaments of her heavenly origin."

It is not out of season to claim that the literature under consideration bears eloquent testimony to the truth of this

last assertion. In its unbalanced pages crops out the idea that it is intended, not for the profession of medicine, but for the public! Whoever saw a wholesome work on medicine intended for the lay reader? This is the surest brand of the imposter, and it further proves what I originally asserted, that every scribbler thinks himself capable of writing on the subject of medicine. What preacher ever dared to compile a treatise on law or engineering? What medical doctor ever sought to enlighten the clerical profession with regard to their duties within their own dogmas?

Would it not be well for the clerical gentlemen overflowing with knowledge and pathos, to extend their efforts in some other direction? If they cannot follow the advise of the Pagan philosopher "*Ne sutor ultra crepidam*," they should at least try and conform to the scriptural injunction.

"The wise man shall seek out the wisdom of all the ancients and will be occupied in the prophets. He will give his heart to resort early to the Lord that made him, and he will pray in the sight of the Most High. He will pour forth the words of his wisdom as showers and in his prayers he will confess the Lord. He shall show forth the discipline he hath learned and shall glory in the law of the covenant and of the Lord. Many shall praise his wisdom and it shall never be forgotten. The memory of him shall not depart away and his name shall be in request from generation to generation. Nations shall declare his wisdom and the Church shall show forth his praise."

No man can deny that the profession of medicine commands and holds within its folds as much mental power, as much learning and as much earnestness and integrity as any calling on earth. Why should every trifler then seek to obtrude his or her opinions on the duties of the doctor? Hear what the present Chancellor of the British Exchequer has to say on that subject: "The doctor is a man who visits our homes when they are darkened with the shadow of death; his skill, his trained courage, his genius brings hope out of the grip of despair, wins life out of the fangs of the Great Destroyer. All blessings upon him and his divine art of healing that mends bruised bodies and anxious hearts."

The higher the intellectual plane the more honored is the profession of medicine and the more cultivated its own members are, the more clearly do they perceive that the lower forms of life pass into the higher and more perfect ones; that the spiritual and physical life in man have a constant influence on each other and that the higher the attainment of the spiritual power the more it acquires mastery over the physical.

No matter how high or noble or self-sacrificing the profession may be, in its trail will follow in the future as in the past, the irrepressible pretender.

Kings and kingdoms, democracies and presidents may flourish and decay, churches, creeds and civilizations may rise and fall, but the medical mountebank shall still remain the veiled vampire of humanity, fattening on the afflictions of the people.

323 Geary St.

NOTES ON THE HISTORY OF PSYCHIATRY.

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HAVING been interested for a number of years in the subject of the history of psychiatry, I have been tempted from time to time to arrange and collect some of the views of various writers at different epochs, with the hope that ultimately such a collection might serve as a basis for a personal study upon the general subject.

With this point of view in mind, a study was presented by me, before the Johns Hopkins Historical Society, and published in the Bulletin of the Johns Hopkins Hospital in 1908, on "The Psychiatry and Psychiatrists of the Augustinian Age." I limited myself here to Asclepiades of Bythnia, calling him the Father of Psychiatry as Friedreich had done before me.

But, as we well know, Asclepiades was not the first writer on mental medicine; nor yet is Hippocrates, yet it will be some of the studies on Hippocratic psychiatry that will be discussed at this time.

Hippocrates has ever been a fruitful theme for discussion. Of the early commentators we know the names of only a very few, and it has been only within comparatively recent years that special attention has been paid to his psychiatric teachings.

When Laehr in 1900 published his memorable volumes on *Die Literatur der Psychiatrie, Neurologie und Psychologie von 1459-1799*—the historical enthusiast was offered a rich grazing ground, but it would be a brave student who would wade through from the earliest thesis mentioned by him,

Montanus, J. B. *Idea doctrinae Hippocratis de succo melancholico et atra bile sententia*, published in Basel in 1555 and again in 1565 down to the most recent and charming historical contribution, that of Farrar in the *American Journal of Insanity* for 1909, entitled "Some Origins in Psychiatry."

Such a task has not appealed to the present writer, but a number of studies have appeared in the last 150 years, some of which have not come before the English speaking student. Even Tuke in his masterly chapter in his *Dictionary of Psychological Medicine* has been content to transmit the rather loose historical work of Semelaigne, Morel and other writers of that time.

Before speaking of the special works in mind, a word may be said of some of the opportunities already open to the student of historical problems. The most extensive and valuable presentation for the English student is Tuke's chapter, already referred to. His work on *Insanity in Ancient and Modern Times*, 1878, is our only attempt at a history of psychiatry in English. The Sydenham translation of Feuchtersleben contains a short, though very excellent, chapter on the history of psychiatry which has served as the *fons et origo* of most papers in English on the subject. Krafft-Ebing, in its English dress, also affords a very brief glance not without merit. These, apart from journal articles, are the chief sources available to the reader limited to English.

To the French student the work of Trelat, *Recherches historiques sur la folie*, 1839, will always be of interest. It has been much quoted. Semelaigne started a series of articles in the *Journal de Medicine Mentale de Paris*—1863-1868 which are of extreme interest, and some of which may be made available in the series which I have in mind, and in Morel's well known treatise there is much useful historical material. Laségue, in the *Annales Medico-Psychologique*, 1844, also began a series of historical essays. They were never finished.

The German reader is more fortunate. Not only has he the early chapters in Heinroth in 1818, in Feuchtersleben in 1844, in Flemming in 1859, Leidesdorf in 1865, Schule in the 90's, but he has the works of Laehr, of Friedreich and the masterly histories of medicine of Spengel, of Haeser and of Neu-

berger, Puschmann and Pagel. Moreover the German periodical literature is very rich and varied.

But for the Hippocratic period the special studies alone will be mentioned, and naturally only a few of these, as Laehr's list shows some 50 or 60 references to theses on Hippocratic neurology and psychiatry.

The special works which have interested the present writer the most have been those of Döring, *Dissertationes Hippocratis doctrina de deliriis*, Marburg, 1790; Nasse H., *De insania, commentatio secundum libros Hippocraticos*, Bonn, 1829—one of the ablest commentaries on the Hippocratic psychiatry that we possess; Friedreich, *Versuch einer Literargeschichte de Pathologie und Therapie der psychischen Krankheiten*, Würzburg, 1830, and Falk, *Studien über Irrenheilkunde der Alten*, *Allgemeine Zeitschrift f. Psychiatrie*, 23, 1866, p. 429 et seq.

It is to these documents that the present notes apply, partly as literal translations, partly as jottings and comments gathered together rapidly for study purposes, rather than as the results of a complete presentation. They are thus presented in a rather desultory manner, thinking that others might profit from them as well as myself.

Friedreich has written the only history of psychiatry that we possess in any language. It is an original piece of work throughout and as such is entitled to be better known among English students of historical matters. It is largely for this reason that the Hippocratic status of psychiatry is given largely as a translation of some of his pages.

In commenting on the "Writings and Teachings of Doctors and Philosophers from the Ancient Times to the Year 1400," he says: "The childlike mind of the tribesmen has disappeared, and the realms of the demons and fantastical world of might have passed. There have come forth instead men who, with deep consideration, earnestly desired to get at the root of the matter and to fathom the psychic life. There is no sphere of the same which they did not subject to their most careful scrutiny and thus it became the object of their research to render the diseased mind normal again."

The following paragraphs will show what these men have accomplished along this line.

A. Physicians.

VIII.

We must honor Asclepiades¹ as the first to teach how to treat the insane, and as one who advanced ideas on their treatment which astonish² us and make us acknowledge with shame that we have made few advances since his time.³

It was he who first laid the foundation of the psychic treatment. He sought through music, wine,⁴ kindness and occupation through exercise of memory and observation, above all, to cure his patients. He recommended reading a book incorrectly to the insane (irren.) so that they might detect and correct the errors. He sought to abolish bodily constraint as much as possible; but thought the dangerous should be bound.

Unfortunately the writings of this great man have been destroyed.⁵ Still we find fragments of them in Celsus and Cælius Aurelianus and most of the quotations by these men given in the later chapters are drawn from Asclepiades.⁶

IX.

Hippocrates has left us no systematic writings on diseases of the mind.⁷ We only find scattered single diagnostic and prognostic observations in his writings.⁸ On treatment he says very little.

It is therefore to be observed that he devoted more attention to feverish irrational talk than to the more important

1. He was born in Prusa in Bithynia and came to Rome about 100 B. C., where he practised his art. One must not confuse this Asclepiades with other physicians of the same name. Vergl. Reines epist. ad Hoffmann et Rupert, p. 394, also see Jelliffe—Psychiatry of Augustan Era.

2. I do not understand why Burdach in his otherwise complete treatise "A Parallel on Asclepiades and John Brown", Leipzig, 1800, did not mention the priority of Asclepiades in this respect.

3. Vergl. Neumann—Diseases of the Intellect. Leipzig, 1822, par. 330.

4. Wine was a favorite remedy of Asclepiades; he first introduced it into *materia medica*. The gods themselves hardly accomplished as much as wine.—Plinius Hist. Nat. Lib. XXIII. Cap. 22.

5. Still there are some of his other non-pertinent books on surgery in the medical library at Florence.

6. See Jelliffe—The Psychiatry and Psychiaters of the Augustan Era. Bulletin Johns Hopkins Hospital, July, 1908.

7. This is no less than should be expected as Sprengel supposes. (*Apologie des Hippocrates*. I. B. S. 73.) Hippocrates likely made most of his observations in a hasty and abrupt manner, without order and connection, and that only physicians of a later and more careful school arranged much according to their theories or as they thought proper.

8. We speak here only of the genuine writings of Hippocrates.

chronic types of psychic disease.¹ Before I give the collected pertinent psychological passages from the writings of Hippocrates I will give some expressions he used.²

Transitory irrational talk is called paraphrenitis, (παρὰφρενιτισ) while that which persists and shows the character of the disease is termed phrenitis (φρενιτισ) or paraphrosune megale (παρὰφροσυνὲ μεγάλη). Of violent irrational talk and wild gesticulation these expressions are used (παρὰχοῦναι, ἐχστῆναι, μανῆναι, ἐχμανῆναι); of the milder (ληρῆδαι, παραληρησαι, παρὰφρονεσαι, παρενεχθῆναι.)

The general expression for all these conditions is paranoia (παρὰνοια). It is common for phrenitis, melancholia and mania. The words "mania" and "melancholia" are not given proper differentiation anywhere. Thus melancholia (μελαγχολία) is sometimes used to indicate a certain temperament, a particular morbid predisposition of the body; sometimes to express madness. Mania (μανία) indicates, at times, nothing more than a high degree of feverish irrational talk and at times also disease with fear and depression. In other places μανία is distinguished as irrational talk with violence and rage from μελαγχολία, and by reason of the absence of fever from phrenitis (φρενιτισ)³.

Therefore the best teachings Hippocrates gives us with reference to psychology are the following:

With Reference to Diagnosis.—In those who are ailing in any part of the body, but do not experience pain, there is also a disease of the mind.⁴

In the spring one observes especially delirium, melancholia, epilepsy,⁵ etc.

1. Hippocrates does not differentiate delirium and mania, much less phrenitis. Neumann, a. a. O. 177.

2. After Heinroth, a. a. O. S. 72.

3 Compare Arnold to the contrary on *Wahnsinn*, etc., translated by Ackermann, Leipzig, 1784, part 1, p. 39.

Hippocrates uses either the word "mania" or derivations of the same concerning a certain degree of passionate irrational talk in mania or other fever, in opposition to the weaker types with which these maladies are now connected. He calls them paranoia, paraphrosune, paraphronesis and the like, to indicate, or to point out such *Wahnsinn*, which since his time has received these exceptional designations.

One sees clearly that among these he understands a feverless *Wahnsinn* which distinguishes itself from melancholia, only through the vehemence of the irrational talk accompanying the madness (with) by means of which this malady so specifically differs from this type of *Wahnsinn*, as the absence of fever is differentiated from mania.

4. Aphor. II. 6.

5. Aph. III. 20.

If fear and sorrow persist for a long time we have a symptom of melancholia.¹

Melancholic persons are most always given to epilepsy and epileptics also become melancholic. If the body suffers most they become epileptic, but if the mind suffers most they become melancholic.²

It is to be noted whether the mind is sound, without reference to outer or inner causes, or if the diseased be contented or discontented, fearful or courageous, hopeful or depressed as, for example, the daughter of Hyppothous retained her understanding and knew everything that went on during her sickness.³

With regard to Prognosis and Result.—It is good if sleep bring the irrational talk to an end.⁴

It is very dangerous when labored breathing and delirium appear in continued fever.⁵

Transparent and whitish urine is a bad sign, especially if it appears during feverish delirium.⁶

If in delirium varicose veins or hemorrhoids appear, the delirium is about to pass off.⁷

Delirium relieves the tremor arising during inflammatory fevers.⁸

Insanity accompanied by laughter is less harmful than when associated with seriousness and apparent pensiveness.⁹

It is good if diarrhea, dropsy, or catalepsy appear in delirium.¹⁰

Insanity (irreseyn) and twitchings after hemorrhage are dangerous signs.¹¹

Delirium (irrreden) vomiting and hiccoughs are dangerous in colic.¹²

1. Aph. VI. 23.
2. De morb. popul. lib. VI. 8.
3. Epid. VI. Sec. 8.
4. Aph. II. 2.
5. Aph. IV. 50.
6. Aph. IV. 72.
7. Aph. VI. 21.
8. Aph. VI. 26.
9. Aph. VI. 53.
10. VII. 5.
11. VII. 9.
12. VII. 10.

It is bad when delirium accompanies pneumonia.¹

Insensibility and delirium (*irrereden*) following a blow on the head are bad.²

Delirium (*irrereden*) and convulsions following sleeplessness are serious.³

Recovery is rare in those in whom insanity (*Wahnsinn*) appears after the fortieth year.⁴

One who is very delirious, neither hears, or sees, or recognizes anyone, lies in the last agonies of death.⁵

Insanity resulting from jaundice is bad.⁶

Alkippus had bleeding piles; he was told not to have them packed; he did however, and immediately began to rave.⁷

The accumulation of blood in the breasts is a sign of the appearance of delirium.⁸

A globular expectoration indicates delirium.⁹

In the delirious (*irrereden*) (*Tobsüchtigen*) it is not a good sign if they are silent from the beginning, but yet are wont to change every moment.¹⁰

Copious frothy expectoration in the delirious (*Tobsüchtigen*) is an indication of an approaching black vomit.¹¹

In the delirious an accompanying cramp causes a weakness of sight. The delirium passes off with hoarseness and coughing.¹²

With Reference to Treatment.—Since helleborus was used in the time of Hippocrates, and almost exclusively as a purgative, we find that most all the directions given by Hippocrates in the use of purgatives, relate to helleborus.¹³

Persons not easily purged by hellebore must prepare themselves by taking nourishment before taking the hellebore.¹⁴

1. Aph. VII. 12.

2. Aph. VII. 14.

3. Aph. VII. 18.

4. Aph. VII. 82 (Also from several expressions from VIII. 1.)

5. Aph. VIII. 15 (Also from other expressions from VIII. 16.)

6. Prognost. lib. 1.

7. De morb. pop. lib. IV.

8. Epid. II. sec. VI.

9. Epid. VI. sec. VI.

10. Praenot. lib. 1.

11. Ibid.

12. Coac. Praed.

13. This is given in detail by Dierbach. "The Medicines of Hippocrates." Heidelberg, 1824. P. III., etc.

14. Aphor. IV. 13.

When hellebore is taken it proves more effective if the body is in action than if at rest or asleep.¹

Therefore if one wants vigorous action from hellebore root the body should be kept in motion, and if a mild action is desired the body is kept quiet or asleep.²

For healthy persons hellebore root is dangerous, for it produces cramps.³

Convulsions brought on from the use of hellebore root are fatal.⁴

The maniacal (*Tobsüchtige*) clothes cleanser in Syrus began to shiver after the fever; his body appeared as if bitten by fleas, the eyes enlarged, movements unnoticeable, the voice weak, still audible, the urine clear without sediment; on purging with thapsia the fever besides most of the perspiration disappeared after the eighteenth day.⁵

X.

SOME EXCERPTS FROM DOUBTFUL WRITINGS OF HIPPOCRATES.⁶

With regard to delirium (*Tobsucht*) they say much depends on the kind of blood found in the body, and as some maintain all depends on the blood whether a man is clever or not.

Overheated blood heats the entire body; the individual talks in an irrational manner, and is not in his right mind because of the severity of the fever and of the unnatural thinning and movement of his blood. The maniacal (*Tobsüchtigen*) resemble the melancholics so far as their irrational talk is concerned.

The melancholics fall into the disease if the blood is spoiled by bile and mucus; they talk irrationally and may become delirious. The same is true in maniacal excitement (*Tobsucht*).⁷

In melancholia pains are felt in the abdomen like the pricking of thorns; the patient is anxious, shuns light and peo-

1. Aphor. IV. 14.

2. Aphor. IV. 15.

3. Aphor. IV. 16.

4. Aphor. V. 1. 4.

5. De Morb. pop. lib. VII.

6. To be more fully given from Nasse and Falk. (S. E. J.)

7. De morb. lib. I.

ple, prefers darkness; the diaphragmatic region becomes swollen and painful on pressure; the patient has horrible dreams in which at times he sees the dead.

This disease attacks people mostly in the spring of the year. It responds to treatment with the proper remedies, but slowly. If not treated carefully it will persist until death intervenes.¹

The symptoms in delirium (*Tobsucht*) are as follows: The patient has such severe pains in the diaphragmatic region that he cannot be touched in this region. This is accompanied by fever, they lose their mind, they stare into space and in general conduct themselves like those with delirium in inflammation of the lungs; they phantasy. The disease is usually fatal. Death occurs either on the 3d, 5th or 7th day.²

In *Tobsucht* there is first a slight fever with pain in the iliac region, more on the right side in the region of the liver. On the fourth and fifth day the fever and pain become more severe, the skin becomes yellow and the mind wanders. To relieve the pain the same remedies should be made use of that are used to relieve a pain in the side, namely, fomentations should be applied to the painful part and the pores kept open. The patient can drink anything except wine, some vinegar or honey water. Wine does not do any good in delirium. The head should be bathed with warm liquids. When the body is soaked it perspires more freely, there is a passage of stool and urine, then the patient rests easier. When the disease shows its symptoms in the region of the diaphragm or stomach it is caused by the bile. It terminates, if all goes well, the seventh day, at the latest the eleventh day. It is likely to turn into consumption and then as a rule the patient never recovers.³

Delirium arises from the excessive humors in the body. The deterioration of the brain, however, arises either from the mucus or bile. Those that are delirious because of the mucus are quiet and do not scream, while those whose

1. Lib. de affection. Ibid.

2. De morb. lib. II.

3. De morb. lib. III.

delirium comes from the bile scream, are very restless and attack people².

In an abstract on predisposition and different kinds of psychical ailments, Nasse* brings out the following words from p. 43 in his enlarged dissertation on all the writings of Hippocrates:—

Dispositio ad insaniam:

1. ad maniam; duo gradus.
 - a. homines adhuc sani (de diaeta 1. p. 352.) (1.)
 - b. iracundi, excitati (ib.)
2. ad amentiam et melancholiam; duo gradus.
 - a. homines fere sani (ibid. p. 351);
 - b. stolidi (ib.)
- I. Amentia.
 1. Amnesia cum tristi animo. (lib. de morb. sacr. p. 309, tract de insan. p. 1286.)
 2. Imbecillitas (de diaet. 1, p. 351.)
- II. Mania.
 1. Conditio subfuriosorum (mania proxima, nisi morbus ipse) C. 1, p. 352.)
 2. Mania cum austero et tristi animo (lib. de morb. sacr. extract, de insan, II, c. c.)
 3. Mania ebrioso, vinosa (de diaet. 1, p. 347.)
- III. Melancholia.
 1. Melancholia cum tristi animo, amentiae proxima (lib. de morb. s. et tract de ins. II, c. c.) eadem abdominalis (de morb. II, 486.)
 2. Melancholia cum vitae satietate intermittens (epid. VII, 1234, 16 V. 1160)—cum nisu ad autocheiriam (de virg. 1, 562; de loc in hom. p. 420.)
 3. Melancholia hysterica (de morb. mul. I, 594.)
 4. Melancholia daemonomaniaca (de virg. I, c.)
 5. Melancholia panica (epid. V. p. 1159; epid. VII. 1233.)
 6. Melancholia cum fixa idea (ib.)

(64 W. 56th St.)

². Lib. de morb. sacro.

*This dissertation of Nasse I hope to make the subject of a later study. Nasse uses Foe's edition of Hippocrates.

SELECTIONS.

CLINICAL NEUROLOGY.

THE SIGNIFICANCE OF AGNOSIA IN INTERPRETATION OF PSYCHOSES.—In discussing the pathogenesis of delusions of negation Denis and Camus believe them to be due to direct cerebral modification. They exclude from consideration the influence of peripheral modifications of the coenaesthesia on the ground that the patients they have studied show with the exception of the delusions, no other loss of the sensibility derived from the viscera; for they manifest appetite and thirst and the normal calls of urination and defecation. The fact that they re-act only feebly to the passing of anoesophageal sound, that they are sometimes incontinent, and that they often refuse to eat are attributed by these authors not to a true anaesthesia, but to the presence of the idea of contrariety or the fixed idea of negation of their organs.

Now, this explanation begs the question; for we cannot legitimately exclude peripheral modifications of all the modalities of sensibility in the organs because some of them are conserved. A study of agnosia demonstrates this; for though the earlier observers were content to attribute to the derangement of a special cortical centre the failure to recognize objects by palpation, yet later observations tend to show that this incapacity is always a residuum of, and probably therefore due to, a deficiency of one of the modalities of sensibility (Dejerine), even though these latter have become insusceptible to other means of clinical demonstration than that signified by the agnosia. Hence, we may infer that the agnosia which remains is of peripheral source; though its exact components are at present beyond our power of analysis.

Before therefore excluding the peripheral causation of ideas of negation, one would either have to prove definitely

their origin in the cerebrum, or at least to exclude partial peripheral limitation of the sensibility of the viscera similar to that now known to be at the root of agnosia.

It may be as well to add that we are not here considering the function of symbolia, which is due to a more complex, and indeed intellectual, process. A symbolia of course may be contributed to by the lack of information from the periphery, but on the other hand, it often originates in defective cerebration.—*Tom A. Williams, in Medical Record.*

TETANY AND CONVULSIONS.—Dr. F. C. Eve records the case of an infant with severe idiopathic tetany in which, after various kinds of treatment had proved unsuccessful, lumbar puncture was followed by early relief and permanent cure. An ounce of the cerebro-spinal fluid was withdrawn. The same treatment has been successfully practiced in infantile convulsions and epilepsy.—*The Hospital.*

TRAUMATIC NEUROSES AND BABINSKI'S CONCEPTION OF HYSTERIA. Tom A. Williams, M. B., C. M., Edin., Washington, D. C. Com. to II Int. Cong. for Indust. Accid., Rome, 1909. (*Med. Rec.*, Oct. 2.)

In this communication, Williams replies to certain objections called forth by his signed editorial (in *Monthly Cyclo-pedia*, Nov., 1908, Recent Advances in Hysteria in Connection with Traumatic Neuroses). He shows that horror, fear and pain need not necessarily suggest any after idea of disability and that they cannot replace this. He concludes that for the explanation of the fixed idea at the root of traumatic neurosis, suggestion is indispensable, and is usually primitive and need neither be subsequent to the accident accompanied by emotion, nor verbal.

He quotes Bevan's 24 cases of "spinal commotion" occurring among the 265 passengers in a single railway accident.

He demands the evidence that exhortation can affect pathological exudates or even functional rearrangements of the Betz cells. He quotes the gastric neuroses as examples which are cured by the removal of false fixed ideas, usually

produced by unskillful suggestions by medical men. There is no trauma in the induction of these, of which the pathogenesis is the same as that of traumatic neurosis. Both are induced by suggestion and removed by suggestion-persuasion and are, therefore, hysterical. The modified suggestions at the fount are imbibed from the patient's surroundings.

The effect of the indemnity, where malingering is not in question, is rather in the *amour propre* than in the pocket. A personal case illustrating this point is fully described, and the author analyses the reasons for the success of its treatment.

There follows a discussion upon the diagnosis of suggestibility. This must not be by exclusion, but by positive signs, which, however, are not yet susceptible of measurement.

He concludes with an appeal for replacement of psychological mystification by diagnostic positiveness in order that our profession may no longer suffer the reproach of incompetence in the face of certain so-called functional nervous disorders.—*Author's Abstract.*

ANAPHYLAXIS.—*The Hospital*, October 30, 1909, says the following on this interesting subject:—

It has become known that it is sometimes dangerous to repeat the hypodermic injections of an antitoxic serum at an interval of more than 10 days from the original dose, provided, of course, that a period of several months or longer is not meant by the interval referred to. If a patient has diphtheria and is treated with anti-toxin, and then is found to have a recurrence of the diphtheritic symptoms, say three weeks after the original attack, it might seem good practice to use the antitoxic serum again. Quite the reverse is the case. Not only is it unwise to use the serum, but it is positively dangerous when 10 days or more have elapsed after the first dose. This danger of repeating the hypodermic injection of an antidiphtheritic serum is an example of what is known as anaphylaxis. It is not the anti-toxin which is concerned in this phenomenon, but the proteids of the horse serum, and it is not only horse serum injections that are followed by this undue and even fatal sensitiveness to a repetition after a certain num-

ber of days have elapsed, but it seems to be a phenomenon that is common to many proteid substances.

An animal, say a guinea-pig, is inoculated with quite a small dose of complex albuminous substances, such as horse serum, and after an interval of not less than 10 days it is inoculated again with a second dose. We will suppose that the doses in each case are small enough not to produce any symptoms at all if used upon separate guinea pigs. If the animal that has been inoculated the second time is observed, it will be found that for a time after the second dose it appears none the worse, but then it begins to suffer from nasal irritability, and it vigorously scratches its nose with its fore paws. It becomes exceedingly restless and short of breath, and it also coughs from time to time. Then it becomes paralyzed, first of all in its hind legs and then in its fore legs, lies helplessly on its side, and finally develops convulsions which terminate in death. These symptoms may run through their course in so short a time as five minutes, though sometimes they take a good deal longer, and occasionally may even pass off altogether. At a post-mortem examination upon the animal all the organs, except the lungs, which are pale, are found to be congested. Rigidity of the diaphragm is well marked and small hæmorrhages are visible in the abdominal organs and in the wall of the stomach. The death of this animal is the result of anaphylaxis—that is to say, undue sensitiveness to the proteids of horse serum as the result of having had a previous dose of horse serum more than 10 days before.

Anaphylaxis can be produced equally well with milk, with egg albumin, and other proteids of a similar nature. Peptones and albumoses and other similar proteids are less effective.

The refractory period seems to be never less than 10 days, and during this latent period a second inoculation produces none of the symptoms described. While never less than 10 days in its development, it may be longer. Anaphylaxis has been known to last for more than a year. The importance of this in connection with serum treatment is obvious, particularly in cases of chronic infection with bacteria, such as streptococci, where it may seem advisable to continue anti-strep-

tococcal serum injections at intervals for weeks or months—in a case of chronic septic endocarditis, for instance.

The explanation of anaphylaxis is a complex problem upon which we do not propose to enter here, but certain main facts about it may be of interest. It has been shown that serum when heated to boiling point before the first inoculation is still able so to affect the animal that anaphylaxis occurs on the second inoculation, provided that the serum used for the second dose has not been heated to boiling point also. If the second dose has not been treated as well as the first the symptoms do not appear. It seems, therefore, that that which is present in the first dose to make the animal hypersensitive to the second dose is not destroyed by boiling heat, whilst that which produces the symptoms in the animal as the result of anaphylaxis when the second dose is given is a substance which heat destroys. In other words, serum seems to contain two substances, each of which plays a part in the phenomenon of anaphylaxis. Of these, the first is a thermostabile substance which sensitises the animal or man; the second a thermolabile substance which produces the symptoms.

Thus the care of the blood's vitality and nerve center resistance is a problem in all therapy, to be watched, weighed and considered.

HEMATEMESIS WITH GASTRIC ATAXIC CRISES.—Haematemesis complicating the gastric crises of tabes is a somewhat rare occurrence, but a case which would seem undoubtedly to be of this nature has been reported recently by Kollarit, of Budapest. For the last few weeks of his life the patient was seized with repeated attacks of hæmatemesis, sufficiently severe in character to give rise to the suspicion of a gastric ulcer or of malignant disease. At the same time he passed blood in his stools. At the autopsy the characteristic lesions of tabes were discovered, but there were found no lesions of the gastric or the intestinal mucous membrane, nor could any other lesion be discovered capable of explaining the hæmatemesis. The case would therefore seem to have been one of parenchymatous gastric hæmorrhage accompanying a gastric crisis. A few cases of the kind have been described by Char-

cot, Vulpian and Neumann and Reichard has noted analogous cases occurring apart from tabes dorsalis. It follows, therefore, that a severe gastric hæmorrhage does not necessarily exclude the diagnosis of a gastric crisis.

Moreover, the reflexes extend not only to the different parts of the circulation, but to other parts of the organism, especially the respiratory apparatus. The result of these reflexes varies qualitatively and quantitatively, according to the part of the circulation affected. For example, excitation of the renal arteries produces a marked elevation of the blood-pressure, whereas excitation of the carotids reacts upon the heart, at times even stopping the beat. It is therefore easy to see that in all diseases which produce alterations in the walls of the heart and vessels, *e. g.* arterio-sclerosis, the auto-regulating mechanism undergoes functional disturbance which manifests itself in abnormal or exaggerated stimuli, starting from the arteries and showing their disturbing influences on the heart and other vessels. Such a mechanism may also be held to explain blood-pressure troubles in valvular disease and in toxic and infective conditions of the vessels, more especially if there be alterations in the arterial walls.—*Abstract from The Hospital.*

CLINICAL PSYCHIATRY.

MIND PARALYSIS OF THE ACT OF LOOKING, OPTIC ATAXIA, SPATIAL DISTURBANCE OF ATTENTION. (Seelenlähmung des "Schauens," optische Ataxie, räumliche Störung der Aufmerksamkeit). *Rudolph Bálint, Monatsschr. f. Psychiatr. u. Neur.* Jan., 1909. Bd. XXV. S. 51-81.

Bálint gives in this article an excellent account of an unusually interesting case. The patient came under observation some four years after a sudden attack of giddiness, unaccompanied by loss of consciousness, which was followed by a hardly definable difficulty in his vision and in the use of his hands.

No trace of weakness was found, and there was no alteration in the reflexes or affection of any cranial nerve. The eye trouble was first noticed by the observer during the vision test,

when the patient read the test type in the following way: first the single letter of the top line, then the last letter of the next line, and so on to the lowest line, only the last letter of each line being read. This remarkable occurrence was found to be only an instance of a general law; the patient noticed only objects on the right. Contrary to expectation, no hemianopia was present. A long series of ingenious tests are then described, from which it was established that the three characteristics of the defect in vision were as follows: (1) The patient perceived only one object at a time, unless his attention was specially directed to others, in which case the normal number could be seen; similarly his attention was of a superficial order, no details of an object ever being seen unless they were specifically pointed out. (2) All visual spontaneity of attention was absent; the patient's visual attention could never be attracted towards a second object except by speaking to him. This feature was less marked during reading, for the patient, once started in the act, would go on spontaneously, though he made numerous peculiar errors. (3) Of two objects the patient always perceived the one on the right-hand side, and his attention was more easily attracted to a second object on the right-hand side than to one on the left. This was so up to forty degrees from the middle line, beyond which the rule no longer held.

The field of vision, as tested by the perimeter, was intact, and the writer therefore speaks of a pronounced concentric reduction of the field of attention, or of the psychical field of vision. It is to be noticed, however, that the patient's attention and will power were in other respects than that concerning vision quite normal.

The motor disturbance consisted in an elementary disturbance of acts carried out by the right hand. The patient was quite unable to draw a line joining two points, or to perform similar tests. Analysis of the defect showed first that it concerned only acts for which vision was essential, and secondly that it was a true inco-ordination, and not, as in apraxia, the substitution of one purposeful but inappropriate act for another. Bálint contrasts the defect with that present in tabes; in both the motor inco-ordination is due to a lack of

sensory impulses, in the case of tabes of the "muscle-sense" type, and here of the visual. He speaks, therefore, of the defect in his patient as an "optic ataxia." It may be remarked that the symptom evidently resembles what is called Lasegue's syndrome in hysteria, which Janet has so well described.

Bálint considers that the visual trouble is primarily one of association, but reserves a discussion of its psychological aspects for another article. The patient, after being under close observation for two years, developed a right-sided hemiplegia with motor aphasia and soon after died. A detailed account of the autopsy findings is given. Symmetrical lesions due to old thrombosis were present in posterior part of the parietal lobes, reaching down, especially on the left side, to the temporal. On the left side was, as well, a more recent softening in the Rolandic region. The cuneus and whole visual apparatus was throughout normal.

The article, in which the case is fully described and discussed, is well worth perusal in the original.—*Ernest Jones, Abstract and Review in Jour. Abnor. Psych.*

LILLIPUTIAN HALLUCINATIONS.—The editorial department of the *Interstate Medical Journal* for November is unusually interesting from a psychologic and psychiatric point of view as the following selections will suffice to show.

The eighth number of the *Revue de Psychiatrie* publishes a résumé of the curious communications made to the Medico-Psychologic Society by M. Leroy, in regard to singular hallucinations—a form of visual sensations but little understood. These hallucinations have the invariable characteristic of being small, of representing beings and definite objects of slight dimensions, at the same time conserving their relative proportions. Hence the term "lilliputian hallucinations," which M. Leroy coins to describe these manifestations. It is in fact a lilliputian world that appears to the eyes of the astonished invalid. One interesting case reported is that of a general paralytic who, following a stroke, had intense hallucinatory delirium of all the senses. In the course of this delirium there appeared numerous lilliputian hallucinations: diminutive

soldiers defiled in serrated rows; diminutive women toyed with their fans; and diminutive bicycle riders coursed around the room. This world of little people—this microcosm—continually underwent transformation. The disturbance lasted three months and terminated only with the death of the patient. Another case showed a passing hallucinatory delirium, with delirium of the sight and hearing, in which the patient distinctly saw little soldiers dancing around the night-lamp. These psycho-sensorial disturbances are a form of micropsia. Now micropsia has been observed especially in hysterics, epileptics, and in the unbalanced; therefore, it is not wrong to assert that lilliputian hallucinations may occur in all mental maladies, supervening in the form of conscious hallucinations. And they are present despite the fact that the invalid conserves normal vision for all the objects which surround him. M. Leroy cites six observations of this peculiar mental phase taken from the works of Taine, Leuret and Brierre de Boismont. Taine's illustration concerns a doctor who, following an attack of cholera, saw little people dancing on a table; Leuret's, a priest who while conducting service saw the church filled with small Ethiopians. In accordance with these and other observations, M. Leroy defines the characteristics of lilliputian hallucinations thus: visual sensations of greatly reduced objects that are multiple and mobile and frequently colored, and invariably produce emotions which are agreeable. He compares them with the cinematographic hallucinations of Régis, and attributes their origin to a toxin on account of their characteristics and the circumstances which accompany them. The pathogenesis of these disturbances would support the opinion that micropsia is of toxic origin. M. Leroy recalls the works of Otto Veraguth of Zürich and those of Heilbronner, ranging himself with the latter by affirming that micropsia is a morbid trouble of the cortex. M. de Clerambault has observed lilliputian hallucinations, such as M. Leroy describes them, in alcoholic and chloral exintoxication, and where there are no intoxications, as in circular insanity, in the persecuted-persecutors, and in tabes. Patients are not surprised but amused by these hallucinations, several being of the opinion that "these little persons are excellent company."

From the same source we abstract as follows:

"*La fin de la Faculté de médecine de Reims, ses derniers Docteurs—Régents,*" by Dr. Octave Guelliot, contains interesting chapters on the Faculty of Rheims and its Regents up to the time of the decrees of the National Assembly and the Convention, when throughout the Republic all faculties and diplomas were suppressed. The first part of the work is devoted to a detailed account of the professors, students, instruction and examinations during the last years of the eighteenth century. The Faculty had been some two hundred and fifty years in existence; in fact, ever since the University was founded at the instance of Cardinal de Lorraine through a bull issued by Pope Paul III. on January 5, 1547, and approved by Henry II. The second part relates the events preceding the application of the law of September, 1793, which adjudicated, among the national property to be sold, the sale of a "house situated at Rheims, called a medical school, belonging hitherto to the Corporation of doctors of the township of Rheims; price 3,000 livres." The third part is probably the most engaging, for here are told many anecdotes of the Regents; how, for instance, while awaiting the reorganization of the medical school during those long and tedious years from 1793 to 1808 when they were prohibited from practicing, they, nevertheless, went among their fellow-citizens and by reason of their scientific training and their devotion to their former vocation gave advice and support to all questions affecting hygiene and how best to aid the sick. The reader cannot but admire such fortitude in the face of what must have been a sickening discouragement, for all this was done with no hope of a betterment in medical educational matters. No chapter in the whole French revolutionary period makes sadder reading than when the National Assembly made so light of the science of medicine that it allowed its demagoguery to blind its intelligence to the needs of a people that was striving for freedom.

FORENSIC PSYCHIATRY.

MEDICAL EXPERT TESTIMONY.—Before the New Jersey State Medical Society in June, Dr. T. P. Prout, of Summit,

inveighed against the present methods of judicial procedure, and said that unless one's knowledge dated from the seventeenth century, one was of very little importance in a court of law. The venerable question always propounded whenever insanity was in question ignored completely the advances that had taken place in two centuries of medical practice. The slow administration of justice was a characteristic of bad civilization, for it meant a costly administration. He did not consider our penal system adapted to cure criminals, who were always abnormal. He hoped that the day might come when an improvement would be made in the present legal system, and the prison would become the laboratory of an active science of jurisprudence. He stated that any three physicians who had had training in a certain department would be able to come to an agreement, provided they had access to all the facts, and suggested a plan by which the medical experts should be appointed in such a way as not to be bound to testify in favor of one side or the other.

Dr. Britton D. Evans, of Graystone Park, said that medical experts could not be criticized for not always being harmonious, as the eminent men who had just spoken on the subject of obstetrics did not seem to be by any means altogether agreed. He stated that the objection to changing the system of employing medical expert witnesses was that the Constitution of the United States guaranteed to an accused citizen the right to summon experts from anywhere that would tend to help his cause. Men appointed as experts with a life tenure would not always agree. That a life tenure did not insure agreement had been shown by the Dred Scott decision.

Dr. Ill thought that when the day came that there would be no difference of opinion among doctors there would be no physical body. He said that Dr. Prout's paper should be widely circulated among medical men, so that honest members of the profession might endeavor to have revised this cumbersome machinery of the law. He believed that if the asking of hypothetical questions could be abolished this would constitute a long step in the right direction. He stated that no countries except England and the United States allowed witnesses to be insulted by the attorneys without rebuke.

NEUROPATHOLOGY.

CHOROID PLEXUS CYST SUDDEN DEATH.—Dr. Grondahl (N. B.) (*Norsk Mag. f. Laegevidenskaben*, Christiania, *The Medical Chronicle*,) Post-Graduate. A robust sailor of 23, of low intellectual capacity, fairly sober, hard working, liable to headache, who had consulted a number of medical men for some defect of his eyes (his sight was good), had rather too much to drink on September 12; he had headache and vomiting, but was well enough to be vaccinated. Next day he returned to work, and drank some beer, but not to excess; that night he vomited again, and at 1 a. m. drank some water; at 5 a. m. he was found dead at the side of his berth, the other four occupants of the cabin having noticed nothing unusual. At the post-mortem the skull and dura were normal; the surface of the cortex was pale, the convolutions were flattened, the pia was anemic, the substance of the cortex was pale and watery on section, and on opening the cerebral ventricles 85 cc. of clear fluid spurted out under pressure. The lateral ventricles were much dilated; in the front of the middle ventricle, just behind the foramen of Monro, was a rounded tumor hanging from the anterior choroid plexus, measuring 2.5x2x2.5 cm., smooth, reddish gray, consisting of a thin membrane and colloid semifluid contents, pushing up the corpus callosum and fornix, bulging the side walls outwards, and completely filling the ventricle. The ependyma of the lateral and third ventricles was quite smooth; a couple of small cysts in the posterior choroid plexus were found in the fourth ventricle. Microscopically, the cyst contained homogeneous colloid free from cells, bounded by a connective-tissue wall lined with low cubical or flat endothelium. It clearly arose from the choroid plexus in the third ventricle. Such cysts are quite common in old people in the lateral ventricles. Death in this case was due to blocking in the foramen of Monro; Marchi preparations of the optic nerve showed no characteristic change. It may be added that the man had double ureters on each side, and double pelves separated by a broad strip of kidney; the ureters joined 4 or 5 inches below their origins on each side.

THE ÆTIOLOGY OF INSULAR OR DISSEMINATED SCLEROSIS has long been as obscure as the symptoms of that protean disease are apt to be perplexing. A case which came to autopsy recently in Paris is the subject of a careful report by Guiéva-Rajes, who is a worker under Raymond at the Charcot clinic of the Salpêtrière. The patient died during an acute exacerbation of his disease, and in his brain and spinal cord were found not only the usual sclerosed plaques from which the French name of the disease has been taken, but also reddish, softer, less sharply defined patches. These, on microscopic examination, were seen to be definitely inflammatory, a leucocytic exudate being a prominent feature. The glia and the myelin sheath of the nerve fibres were extensively broken down, but the axis cylinders were comparatively unaffected. The extent and distribution of these zones corresponded roughly with those of the typical older patches of sclerosis, and the inference is that the newer plaques were responsible for the exacerbation of symptoms which the patient had exhibited. It seems at any rate reasonable to assume this, and also to argue in favor of a microbic origin for the disease: it is clear that this conception, if it turns out to be based on a solid foundation, may open up possibilities for the future of much greater success in the treatment of disseminated sclerosis than has ever been attained in the past.—*The Hospital*.

CENTRAL NERVOUS SYSTEM LESIONS IN EXOPHTHALMIC GOITRE.—Drs. Bret and Mouriquand (*Lyon Medical*, 1909.)

One of these unusual cases recently came under the observation of the authors. The patient was a woman 35 years of age, who had carried a goitre ever since childhood, the symptoms of exophthalmic goitre first manifesting themselves about eight years ago. The disease rapidly progressed from year to year, in spite of internal medication. At the time of the patient's readmission to the hospital, where she had been previously under observation and treatment, the authors were enabled to demonstrate the presence of atrophy of the left half of the tongue, due to central paralysis of the hypoglossal nerve. This atrophy had certainly not existed at the time of the preceding examination, and is referred by the authors to the long-

continued action of the toxin of exophthalmic goitre. Other etiological factors such as embolism, atheroma, chronic nephritis and syphilis were absent.

NEUROTHERAPY.

STROPHANTHIN.—A sharp distinction must be drawn between the therapeutic use of amorphous and of crystalline strophanthin until a thorough investigation has settled whether these two preparations are identical, or whether they differ in respect to their qualitative and quantitative action. The small doses which have usually been given of amorphous strophanthin, and the large doses in which crystalline strophanthin has been given by Schedel, gave rise to the supposition that amorphous strophanthin is more toxic and more powerful than is the crystalline glucoside. The interesting work of A. Heffter, however, appears to show that the opposite is really the case. He examined commercial brands of strophanthin, viz.:

crystalline strophanthin	(g-strophanthin or gratus-stro-
	phanthin Thoms),
amorphous strophanthin	of Boehringer & Sons,
“	“ of E. Merck,
“	“ of Th. Schuchardt.

He found that the crystalline is not identical chemically with the amorphous strophanthin, and that the amorphous strophanthins show differences among themselves. Further, pharmacological investigation shows that the effective doses of the crystalline preparation compared with those of the amorphous preparation are in the proportion of 1:15—2. Again, the amorphous strophanthin preparations of Boehringer and of Merck are not of identical chemical composition, and their action is not equally powerful, Merck's strophanthin being $1\frac{1}{2}$ times more powerful than are the two other commercial forms of amorphous strophanthin. It is therefore clear that the question of dosage must be carefully

considered according to the preparation used, and this most of all when it is applied intravenously.—*Merck's Annual Report*, 1909.

NITROUS OXIDE-OXYGEN VS. ETHER.—Crile, in the *Wisconsin Medical Journal*. The natural immunity of the patient is little, if at all, impaired by nitrous oxide-oxygen anesthesia, as contrasted with a distinct impairment under ether anesthesia. Likewise there is less surgical shock under nitrous oxide-oxygen than under ether anesthesia. In patients handicapped by infection or by a previous impairment of the central nervous system, nitrous oxide permits a safer operation than does ether. The advantage of nitrous oxide over ether is greater when the handicap is in the central nervous system than when such handicap is in the heart.

CHOLESTERINE VERSUS TETANUS, PHTHISIS AND COBRA POISON.—We reproduce from a year old copy of *The Hospital*, the following valuable clinicotherapeutic experience, especially the closing paragraphs. Lourties, in the *Journal des Practiciens*, publishes an account of some 20 cases of pulmonary tuberculosis, treated by him with injections of biliary extracts, after the method introduced by Professors Lemoine and Gérard of Lille, based on the antitoxic action of the liver. The series of cases comprised all stages of the disease, with the usual symptoms and signs, cough, fever, night sweats, bacilli in the sputum, etc.; and marked improvement is said to have taken place in all cases save two, the distressing symptoms gradually disappearing, and the patients rapidly gaining in weight. Moreover, in cases in which from one reason or another treatment had been stopped, rapid deterioration set in, and symptoms reappeared. The treatment consists in the injection, sub-cutem, of 2 c. c. of paratoxin every second day, continued over a period of several months, sufficiently long to exclude the possibility of the amelioration being merely due to change of treatment: a phenomenon by no means rarely seen by those who deal with patients of such a sanguine temperament as the tuberculous. Lourties hazards the opinion that it is possible that the benefit often derived from taking

cod-liver oil in this disease is to be explained by the specific action of the biliary extracts contained in the oil. He similarly explains the undoubted immunity from tuberculosis possessed by people who are subject to joint affections, as being the result of the marked hypersecretion of bile found in such persons. He is led to think that the action of the biliary extracts is specific from the fact that doubtful cases of the disease in which no bacilli could be found in the sputum, derived no benefit from treatment. The treatment, he maintains, is rational, since it is well-known that cholesterine has an anti-toxic action on the venom of the cobra; moreover Almaggia has recently reported two cases of tetanus, cured by injection of the same drug.

CALCIUM HYPOPHOSPHITE IN EPILEPSY.—*Pediatrics* for August, translates. M. Cicarelli (*Il Policlinico*, 5 and 6, 1909; and *La Clinique*, July 9, 1909), after noting the good results obtained by several Italian physicians in the treatment of epilepsy with lime salts, conceived the idea of employing calcium hypophosphite, the phosphorus contained in it being supposed to have a good effect as a reconstituent for enfeebled epileptic subjects. Calcium hypophosphite was given in doses of from ten to fifteen grains in cachets three times daily, and excellent results were observed with twenty-five patients. The author considers the salts of calcium to be preferable to the alkali bromides, as bromidism is avoided, and the general condition of the patient is improved and a more cheerful mental feeling induced. The bromide treatment may be continued at intervals, alternating it with the calcium hypophosphite, bromide being given for a week or ten days and the calcium salt for a fortnight.

PREVENTION OF POSTOPERATIVE THROMBOSIS.—Mendel applies the term "thrombophilia" to a predisposition to formation of thrombi which some patients seem to display—the exact reverse of hemophilia. In one such case in his experience a previously healthy woman had phlebitis during the puerperium and since then has developed thrombophlebitis with every intercurrent infection since, once during influenza

and⁷ once with simple tonsillitis. A tendency to eczema seems to accompany this thrombophilia. In another case thrombosis developed after a trauma of the foot and recurred during attacks of influenza and also in the inferior mesenteric vein during a catarrhal affection of the large intestine. After subsidence of the colics the stool contained traces of blood for weeks, but there were no objective findings otherwise except tenderness of the entire colon. The patient recovered gradually, but only 6 of the 60 similar cases on record terminated in recovery. The integrity of the heart and large vessels confirmed the non-existence of an embolus; the favorable outcome was probably due to the fact that the inferior instead of the superior mesenteric vein had been involved. These and other cases in his experience confirm the assumption of an infectious process in the wall as an indispensable factor in thrombosis. The thrombosis in these cases has generally been accepted as a casual complication of traumatic inflammation, but Mendel regards it as a sign of abnormal constitution of the blood which reacts to any local or general infection with the formation of thrombi. Interference with the circulation does not seem to be much of a factor in the thrombosis, but at the same time the limb should be raised to prevent extension of the process. Allowing patients to get up early after laparotomy or delivery will not prevent the development of thrombi in a predisposed venous system. No proof has been offered to date that thrombosis and embolism are less frequent when the patients are allowed to get up early. On the other hand, it must predispose to embolism, especially when there is a tendency to abnormally rapid coagulation in the blood.—*Münchener Medizinische Wochenschrift*.

THE EFFECTS OF ALCOHOL UPON THE NERVOUS SYSTEM AS EXHIBITED IN HOSPITAL AND ASYLUM PRACTICE. By F. W. Mott, M. D., F. R. S., F. R. C. P., Physician to Charing Cross Hospital and Pathologist to the London County Asylums; Fullerian Professor of Physiology, Royal Institution.

Prefatory brief account of the structure and functions of the nervous system.—The brain, the spinal cord, the nerves.—The nervous unit or neurone.—Nerve cells and nerve fibres.

The inherited "invalid" nervous system, especially the brain.—The nervous system made "invalid" by alcohol.—The nervous system made "invalid" by causes other than alcohol. The combination of the above factors.

1. The transient effect of an abuse of alcohol upon the stable healthy nervous system.

2. The permanent effects of continued abuse of alcohol upon the stable healthy nervous system.

(a) The subtle unrecognizable changes which constitute a vicious habit.

(b) The structural recognizable changes in the brain, spinal cord, and nerves, not so much a direct result of the alcohol upon the nerve tissues as its effect upon the organs of digestion, assimilation, excretion, and circulation, whereby poisons generated in the body by deranged bio-chemical processes, and poisons produced by microbes which have invaded the tissues of the body combine and conspire with the alcohol to produce a morbid vicious circle which can, however, be broken by withholding the alcohol.

Microscopic changes in the nerves, spinal cord, and brain, also in the organs of the body. Correlation of these changes with the mental and bodily symptoms.

3. The effects of alcohol upon the "invalid" brain.—To the feeble-minded, the epileptic, the potentially insane, and all those who from inherent or acquired causes lack highest control, alcohol acts as a poison, even in moderate quantities.

Hospital and asylum statistics compared.

THE RESISTIVE POWER OF THE HUMAN BRAIN AGAINST ALCOHOL, AND ITS LIMITATIONS. By Dr. Clouston, Edinburgh.

More consideration hitherto given to the positive than to the negative effects of alcohol on the human brain. Defects of Kraepelin's and Macdougall's scientific experiments as to the effects of alcohol on normal brain action.—Enormous power of resistance in really sound and normal brains to effects of alcohol.—Majority of men in Europe and America drink alcohol moderately in some form, and many to great excess, without much apparent and immediate ill effects.—Effect of

this evident on popular opinion.—“Immunity” against alcohol.—Mankind willing to take risks in this and all other directions.—The pleasurable sensations produced by alcohol. Mankind has always craved for, and will always crave for something that gives pleasure, produces a feeling of the ideal, and an elevation of the social instincts and the emotions. Something more than food, and different in its subjective effects from food desired, *e. g.*, alcohol, opium, Indian hemp, cocoa, tea, coffee, tobacco, spices, condiments, &c.—Probably those have helped in the evolution of humanity.—What we want to find out is the dangers of those things, and their special dangers to special individuals.—This can only be done by studying scientifically the power of resistance of the brain generally, and in each kind of brain, against alcoholic effects.—*Further considerations of “Immunity.”*—Dr. Archdall Reid’s views.—*Toleration and danger points of alcohol.*—Racial relations of alcohol.—Power of resistance or toleration cannot always be ascertained accurately except by experiment. Danger of this.—Mental inhibition and its impairment or destruction by alcohol, the great risk. The detailed effects of alcohol on the higher brain cell.—How those effects are recovered from, or not recovered from.—Especial dangers of alcohol on the brain before twenty-five years of age—the developing brain, the brain of woman, and the especially bad effects adolescents are liable to.—Alcohol and primitive peoples and savages—*e. g.* Red Indian.—Analogy of those results to the effects of certain kinds of brain in civilized peoples.—The “inebriate” or “dipsomaniac.”—A disease mostly incurable when well established.—Public opinion greatly changed and advanced in regard to the necessity of restricting the liberty of the inebriate within the past twenty-five years (the English and Scottish Departmental Reports on Inebriety).—Other symptoms in the Inebriate than the uncontrollable craving for alcohol.—Inebriate is among the “unfit,” either to procreate or even to live in the higher sense.—He is already dead to the privileges and the duties of citizenship.

PSYCHOTHERAPY.

PSYCHO-PROPHYLAXIS IN CHILDHOOD.—A close analysis shows that the real cause of most so-called “nervous prostration” is failure of adjustment to environment, and is psychogenetic. A rest cure in itself is inefficacious, but gives the doctor the opportunity to re-educate the perverted trends of the patient’s disposition. Before reaching the neurologist, a patient has been “suggestioned” *ad nauseam* and such empirical therapy has failed, as has the injudicious appeal to his will power, already exhausted by the complexities, social and professional, which have contributed to his failure or adjustment.

To arrest a morbid train of thought and set a mind at rest is an act requiring knowledge and skill. Its attempt by untrained men has been even more disastrous than the work of the tyro in gynecology, for it is the direct cause of the rise of Christian Science, Emmanuelism and such cults. Happily, a body of experts in psychopathology is now counteracting their injurious influence, for an affectation of knowledge will not supply the public’s demand for real psychic treatment. But we require greater facilities for instructing medical men in the principles of psychopathology and therapeutics, and proper wards and out-patient clinics under competent teachers should be provided at least in every large city.—*Tom A. Williams, in The Lancet-Clinic.*

DR. BURR ON EMOTION AND MENTAL THERAPY. (Abstract from address before Penn. Medical Society.) That mind influences body is no new discovery. Fright dries the mouth and even stops gastric digestion. Every battlefield gives evidence of the effect emotion has on the large intestine. Emotion of any kind influences the pulse beat and may render the person insensible to the strongest and most painful stimuli. It is worthy of notice, however, that it is emotion rather than the intellect which has these effects. I do not think that pure reason apart from emotion ever influences bodily function.

THE USE OF ISOPRAL IN INSANE PATIENTS. (*Rev. de Psychiat.*, Oct., 1908.) Vallet, A.

Isopral is a hypnotic belonging to the chloral group of drugs. It has hitherto been little used in France. Chemically it is a tri-chlor-iso propylic alcohol; it is in the form of prismatic crystals, readily soluble. After giving details of its employment in more than twenty cases of mental disorder the writer summarizes his results as follows: The drug is a useful auxiliary to chloral and one which patients take readily; it induces tranquil sleep. In the doses employed no influence on pulse or temperature was observed, and there were no unpleasant symptoms of any kind. At first it was given in doses of from four to eight grains, but these were found to be rather too small. It may be given without anxiety in an initial dose of ten to fifteen grains.—*M. Eden Paul, in Jour. Mental Science.*

“EOSINOPHILES” IN CEREBROSPINAL MENINGITIS, ETC.
—The net result of a large number of blood counts made in cases of epidemic cerebrospinal meningitis by Dr. William Dow in Glasgow brings out two main facts about the leucocytes in this disease; first, that there is nearly always an absolute increase in the total leucocyte count, a polymorphonuclear leucocytosis, which serves to distinguish it from at least one of the other diseases—typhoid fever—for which it may be mistaken; and, secondly, that an entire absence of coarsely granular eosinophile corpuscles from the differential leucocyte count is a point of very bad prognosis.

The number of observations made was considerable. Without entering into any great detail we may give the author's own general inferences. An analysis of his observations leads him to conclude: (1) That cases of epidemic cerebrospinal meningitis are always accompanied by a leucocytosis, whether the attack is acute, abortive, mild, or chronic. (2) That the character of the leucocytosis is practically the same in all instances, both adults and children, and is the result mainly of an increase in the number of the polymorphonuclear cells. (3) That nevertheless a lymphocytosis may very occasionally be observed in infants and young children. (4)

That there is a relative decrease of the large mononuclear elements alike in fatal and non-fatal cases, though less marked in the chronic type. (5) That in the first three groups there is sometimes an absolute decrease of the large mononuclear elements and occasionally total absence of these cells. In the chronic group absolute decrease, like relative decrease, is little marked. (6) That eosinophile corpuscles in acute fatal cases are always absent, although present in varying degree in all the other groups.

The highest individual count was 66,800 leucocytes per cub. mm. in an acute case. In two abortive cases the leucocytosis was observed after the condition was improving. Moreover, the number of white cells in general varies markedly from day to day and without relation to the course of the disease, nor can any clear connection be established between the leucocytosis and the character of the temperature.

It may be remarked that myelocytes were never observed in any of the films examined. Blood platelets were always present, sometimes in large numbers. No marked difference was noted in the frequency of occurrence of these elements in the fatal and non-fatal cases respectively.

As regards diagnosis, it may be again noted that the leucocytosis is only of value in excluding typhoid fever. From the point of view of prognosis, the absence of eosinophile corpuscles in the acute stage of the disease may be considered of grave significance, but it does not necessarily mean that a fatal issue will immediately ensue.

THE ELECTRIC PSYCHOMETER.—Frederick Peterson refers to Tarchanoff's work on "Galvanic phenomena in the human skin in connection with irritation of the sensory organs, and in various forms of psychic activity," published in 1890. This investigator's remarkable work lay buried for years. The writer gives here a recapitulation of Tarchanoff's experiments. In his own work the writer uses a Deprez d'Arsonval mirror galvanometer and a horizontal glass scale placed about one meter from the galvanometer to which the lamp is attached. The light shines upon the mirror from which it is reflected to the scale. Here the light travels to and fro, marking the

fluctuations in the organism of the individual experimented upon. As a rule the galvanometer is put into circuit with one or two Bunsen cells and a rheostat, the patient's hands making contact upon copper plates on claspings nickel-plated brass electrodes. In order to affect the instrument the emotions excited must be actual and real. The patient is required to respond to any word uttered with the first word that comes into his consciousness. Indifferent words produce no effect on the finger of light in the psychometer, but words exciting emotion send the light along the scale for a varying distance in proportion to the intensity and actuality of the emotion aroused.—*Medical Record*.

NEURO-DIAGNOSIS.

THE PULSE OF THE NERVOUS SYSTEM.—J. Henry Dowd, of Buffalo, calls the rise and fall of the phosphates in the urine the pulse of the nervous system and believes that by careful examination of this and watching its changes we can predict nerve storms and give a prognosis in nervous complaints. Much of the suffering of to-day is due to lack of mental balance. Examination of the phosphatic index is much more important than many forms of examination made as a routine. Bed-time examinations can be made in ten minutes by the author's method. In indefinite pains the phosphatic index should be the guide for treatment. Pregnancy is positively shown by the appearance of the fern-shaped crystals of the phosphates.—*Medical Record*.

NEUROPHYSIOLOGY.

ALBUMINURIA AND ROWING EXERCISE.—In examinations made on members of the College boat clubs at Oxford, Dr. Collier, in *The Hospital*, found urine collected from one to two hours after rowing frequently contained albumen. In some instances this was true of every member of the crew. The more energetic the exercise the more marked these results.

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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

A DOCTOR AND HIS PATIENT'S DEATH FROM STRYCHNIA are engaging the attention of Kansas City and Independence, Missouri. A three grain capsule, contents unknown to a coroner's jury, a nurse's opinion that the capsule caused convulsions and speedy coma following twenty minutes after the capsule given an hour after breakfast, death by coma taking place by nightfall and a post-mortem discovering half a grain of strychnine in the liver, the patient having taken quinine, iron and strychnia *ad libitum*, have resulted in a coroner's jury verdict of poisoning and the arrest of the attending regular physician, on the charge of murder. Three or four one sixtieth grain doses of strychnia every fifteen minutes hypodermically were administered by the doctor's order after the convulsions set in. A fake negro doctor also prescribed clandestinely.

The patient showed no *risus sardonius*, no pain, no consciousness during the spasm, frothed at the mouth like an epileptic, rolled his eyes conjugately like an epileptic, turned his neck similarly. Relaxation and coma followed the convulsion. The trained nurse was more confident than the editor of this magazine could be that the capsule killed the patient and the coroner's jury agreed with her professional expert (?) opinion and gave its verdict accordingly. Here is the peril of the all knowing nurse. Verily a little knowledge in a trained nurse may be a dangerous thing for the doctor. *Post hoc ergo prompter hoc*, was her style of reasoning.

LISTER MONTGOMERY ON A FEDERAL DEPARTMENT OF HEALTH.—In the republic of Mexico they have their superior board of health, with a well known medical scientist as its president. In the Dominion of Canada they have in each province a provincial medical secretary, the headquarters of which, so far as the provinces of Quebec and Ontario are concerned, is at Ottawa, the seat of government of the dominion. Their rank is nearly the same, or practically equivalent to those of the Ministers of the various departments in the Canadian government, while the latter officials are on a par with a Cabinet position in our government.

In our little sister republic, Cuba, there is in addition to their several other departments, namely, those of justice, state, the treasury, agriculture, etc., a department of public health and charity, created under the new constitution of Jan. 28, last. It is presided over by a physician, Dr. Matias Duque, whose title is that of secretary of this department; it is a cabinet position, and he is recognized officially as a member of the presidential family.

My friend, Dr. John Guiteras, director of sanitation of the Cuban department of health, in a recent communication advised me among other things, that \$3,427,000 was appropriated by their federal government to defray the expense of said department for the past year, 1909. Whereas, our national government, through the Department of Agriculture, has for some years past appropriated about \$8,000,000 annually for

plants, pigs, cattle, bugs and beetles, but not one dime for hundreds of thousands of babies and public health, but only indirectly, that dairy products and meat inspection is carried out. What I intend more particularly to convey is, that nothing has been done by the federal government in biologic research for the germ of whooping-cough, spinal meningitis, nor anything else practical for the welfare of the babies of our land and public health generally. Then, is it not pertinent to inquire, are these little people receiving a square deal? The results of the first year's work done by the department of health in Cuba is, since February, the Pearl of the Antilles, has been entirely free from small-pox, yellow fever, and bubonic plague. Hence, in Cuba, they think, and rightly so, that since their present sanitary conditions were inaugurated the results thus far achieved may be considered one of the most brilliant in the world. Can this be said of our own glorious United States, regarding all of those preventable and other quarantinable maladies, pellagra included?

Medical scientists' views, therefore, must dominate and prevail for the prevention of loss of lives and the prevention of illness among the people of this nation so far as possible, on the principle that the Mongolian race pay their doctors to prevent disease and not for the services physicians render when they become ill.

If we have not the proper influence with Congress and others of the national government, by appealing to their conscience and otherwise, then let us exact a pledge from every candidate for congressional honors before election day, yes, during a campaign and from candidates "higher up," that they will favor the creation of this department, and with the appointment of a member of the medical profession in the cabinet; and, after their election to office, require them to keep their pledge, or, in lieu thereof, we should elect more physicians to each of our national legislative bodies than has ever been done heretofore, even though you may have an antipathy to delve so deeply in political affairs.

Probably the obtrusive pestiferous domestic house fly, and the viciously aggressive mosquito have been the cause of more victims of disease and death by their transmission of

germs of tuberculosis, yellow fever, typhoid, diphtheria and scarlet fever, cholera, anthrax, etc., than all the campaigns and battles of all the wars throughout the world combined from the remotest period to the present time.—*Medical Fortnightly*.

Years long ago the editor of this journal made suggestion for a bureau of health and a medical member of the president's cabinet, but O Lord, how long must the country yet await the coming of its sanitary salvation? When will the solons of the land hearken unto our prayer?

PRESIDENT ARTHUR AND GUTEAU'S INSANITY.—Edwards of the *Globe-Democrat*, (Dec. 27th, 1909), gives out the following as a part of an interview with the deceased ex-president after the execution of the insane assassin of Garfield. That Guiteau was insane, no doubt existed in the professional mind after E. C. Spitzka's autopsy on Guiteau's brain and none existed before in the mind of the editor of the *Alienist and Neurologist*, at the time of the tragedy, as he so stated to Mr. Schofield when declining, for imperative considerations, his request to appear and testify at the trial.

"How glad I would have been if the Medical Commission appointed to examine into that poor creature's sanity had reported that he was insane, as the autopsy clearly proved was the case. For then I could have been justified in doing what my own inclination in the matter had always been and committed him to an insane asylum. I believe that he was insane, and there was then, and there is now, something awful to me in the thought that any American, in the full possession of his faculties, should be guilty of the assassination of the president or of any administrative officer.

"It would have been madness for me to have interfered with the sentence of death after a majority of the commission of experts had reported that Guiteau realized and was responsible for the enormity of his act. The American people were insistent that the assassination of Garfield should be avenged, and nothing but a unanimous report of a commission of high expert authority that Guiteau was insane would have justified, with the American people executive interference with the

operation of the court's sentence. And, realizing this—the clamor of public opinion for the poor creature's death—I did not dare interfere. And then, after it was too late to act, the surgeon's knife proved conclusively that Guiteau's awful deed was that of a lunatic."

In all presidential assassinations or attempted murder it is natural therefore that a doubt of the assassin's sanity or attempted assassination should exist and proper that a commission of inquiry as to the sanity of the perpetrator should be instituted, though lawyers who train themselves to seek and keep the front of the public stage too often in matters medical and scientific, beyond their intellectual depth, look upon the conviction of such murderers as kill Presidents and Kings, as sound public polity. It is *prima facie* evidence of insanity when an intelligent American citizen, without rational personal motive, kills a president of this country of more than average justice; a government with its constitutionally guaranteed opportunities of righting real or apparent or fancied wrongs through public sentiment at the ballot box.

STANDING BEFORE KINGS. SIR WILLIAM BROADBENT.—Solomon's promise of the reward of the diligent in business, that they should stand before kings, is not so great a boon in these degenerate days of indoor luxurious life when the erector spinae and other back muscles are in a state of myatony from comparative disuse.

Sir William Broadbent, the English surgeon and neurologist, has condemned the torture of standing by the hour waiting the royal pleasure to give audience. To the neurasthenic and sedentary, unaccustomed to standing long, this is cruel and without the reflex relief to the brain and cord and muscles of being permitted to move about.

The Marquise de Fontenoy calls attention to this subject in the *St. Louis Republic*, in such a manner and quoting also from Broadbent's interesting book, that it is hoped that royalty will take notice.

"Sir William relates that after the death of King Edward's eldest son, the late Duke of Clarence, at Sandringham, where he was in charge of the case, he was sent for by Queen Victoria

to Osborne, to give her an account of her favorite grandson's fatal illness. He writes:

"She was sitting in an ordinary chair at a writing table, and, of course, I had to stand. I was there exactly one hour and a quarter. I was then told that Princess Christian wanted to see me, and I was conducted to the Duchess of Connaught's room on the floor above. I could hardly crawl upstairs. I was kept standing another fifteen or twenty minutes, talking to them and to Princess Beatrice. They were very kind and cordial, but I was glad when the interview was over."

And here is Fontenoy's correct comment on this cruel custom:

"In this instance Sir William, already an elderly man, was only called upon to remain standing for a little over an hour and a half. But there are many occasions when people of the royal entourage and court dignitaries of both sexes, some of them advanced in years, have to remain standing for three, or even four, hours at a stretch, until they are almost fainting from physical exhaustion. It is not as if they could walk about during that time; but the necessity of remaining more or less immovable in one position that is so trying. Even the kindest hearted of monarchs and royal personages seem to be insensible to the suffering which they inflict."

THE A. M. A. ought to have in its membership every regular physician. It should be in fact as in name *the* medical association of America, including all regular physicians of the United States, Canada, all British North America and the South American states. It can not secure them under that provision of its present constitution according membership only to members of state and county societies, for all regular medical men of good character can not or will not and in some instances should not, perhaps, for personal satisfactory reasons, be members of the affiliated local societies. Obnoxious cliques sometimes govern the local societies and keep good men out of them. Good men will not join local societies for this or other good reasons.

It is tyranny to such, to keep them out of the national

society because of non-membership in the local, county and state societies.

It is also suicidal to the best interests of the A. M. A. With this restrictive provision against a complete membership, it cannot be the representative national society of the entire regular profession it ought to be.

Better modify this law of the organization so as to let in all good regular physicians of the United States, Canada, etc., without conditional society membership.

THE EDITOR'S NEW NEUROLOGICAL DICTIONARY.—*Clavus Spinalis* is a sensation as if a nail were driven into the dorsal spine. Found by Dr. C. H. Hughes in psychasthenia.

The Nose Pinch Reflex is the reflex response of the levator alae nasi and levator anguli oris, when the nose is sharply pinched and jerked downward.

The Virile Reflex is the downward penile jerk when the fore skin is steadily pulled or jerked up. No erection need be excited in this reflex by friction as in the bulbo cavernous reflex of Onanof. The nose pinch reflex jerk is upward. The penile reflex jerk is downward.

Electric analgesia is insensibility to pain produced by changing molecular action in the course of a sensory nerve by electricity, as practiced by the writer for half a century, especially in neuralgia, neuritis, ataxic pain.

Lack of time for more extended explication impels this brief lexicographic form of description.

THE POLICEMAN'S CLUB should never strike the head save in the extremest of self-defense necessity, as when a policeman is down or a dangerous weapon menaces. Cracked skulls and club concussed brains are not often reparable. The arms and shoulders of a prisoner disabled are more protection to the arresting officer than a hit on the head that does not produce insensibility, and a blow that causes insensibility in a prisoner is a peril to his life or sanity and policemen have seldom the right to make lunatics or corpses of prisoners, whatever the provocation.

Recently a policeman with his club fractured a not dangerously resisting prisoner's head so that he died, and got off

with a fine of five hundred dollars, while even the law enacted for the benefit of railway corporations allows five thousand dollars damage for killing a human being and bereaving his friends and family.

Policemen should be trained to be dispassionate like the attendants in a lunatic asylum and to never strike in malice or for vengeance. Our policemen should be men of the best quality of head and heart.

Many arrested offenders against the law are mentally maimed, either idiopathically or alcoholically, and need no homeopathic police treatment. Vulgar or profane speech is also reprehensible and beneath the dignity, to say nothing of its wrongfulness, of an arresting officer, representing or who ought to represent only the silent majesty of violated law, not to mention again the graver wrong of hitting a prisoner on the head with a club.

The Cincinnati Lancet-Clinic appears in a new dress, enlarged and every way improved in substance and appearance, in keeping with its increased prosperity. May its already well deserved success continue.

Medical Review of Reviews is now edited by Dr. William J. Robinson, Dr. Daniel Lewis, the able editor up to date, having retired. Will be issued from 12 Mt. Morris Park, W. New York City. The *Review of Reviews* will be enlarged. Price the same. A good man goes and a good man comes.

REFORM CONDENSATION IN MEDICAL TEACHING.—Dr. Edmund Souchon, Professor Emeritus of Anatomy, Tulane University, New Orleans, La., makes a timely and forceful plea, in the *Medical Record*, for reform in the direction of teaching essentials and omitting non-essentials in the medical curriculum. He says, and truly: "Essentials are neglected at the expense of non-essentials" with the result that medical colleges fail in accomplishing their supreme duty which is, primarily, to train students properly for the work that awaits them upon engaging in practice.

He notes the minutiae of detail work in the laboratories, etc., forced upon the students, who cannot repeat the work in practice. This article in November 20th, 1909, issue of the

Record is worth the attention of all medical educators. The latter should counsel together and spare students from overwork and all non-essential biological and chemical laboratory detail personal work possible to be omitted without harm to his needs in post graduate practice. The infliction of fifty or more chairs on a medical student, each teacher or professor pressing the minute details of his department, is a strain on the student's vital endurance. Such a curriculum is not psychically sanitary for any but the best psycho-neurally endowed and not a very rational or consistent procedure, emanating from physicians whose profession includes sanitation and hygiene.

While cramming the brains of medical students with life enlightening and life saving facts it is well also to have a care for the psychic endurance integrity, and life of the recipient brain.

Let anyone disposed to controvert this look over the curriculums of medical college study and figure out how much time is allowed the medical student's brain to mentally digest the mass of facts forced upon him in the present college course, and four years is a long enough preparatory course after preliminary schooling for the man who expects to take part in this world's work. As a physician life is too short for more.

SANITY FOR POLICEMEN.—The Police Board of St. Louis after deliberating on the case of a policeman who had embraced an opportunity and a woman not his wife, and not in the line of duty, and after considering the patrolman's previous condition of mental disability, has decided that mental incapacity shall henceforth cause members of the Police Department to lose their jobs, even though they may fully recover.

Unless this decision should be more definite than the above verbiage implies, it will be hard on the force, for patrol idiocy, imbecility and insanoid is about as common as malarial diseases in swamp land. The patrol idiot who cracks his victim's head, when a disabling blow on the right arm would answer to overcome resistance or assault and be more humane,

less dangerous and less troublesome to the striking officer, would under such decision lose his job.

Then there is the inhuman sweater who treats the arrested man as though he were guilty, though he may have only somebody's word for his guilt and the imbecile who can not command logic enough to see possible innocence in any one he may be called on to arrest. There is also the law guardian lunatic who constitutes himself judge, jury and high potentate, who considers himself called upon by some higher law than governs other men to decide and punish, before the courts have their lawful chance to decide.

Then there is the erotic dement whose lascivious penchant inclines him to flirt with the kitchen or pantry maid at the back door while the burglar is going in at the front.

There is too much of this mental weakness yet remaining on the force and the St. Louis Police Board will do a wise thing for the good name of the force generally and the better minded men of our mainly good police department, if they would weed out the imbeciles, the dements, the idiots, insane and insanoids. A policeman should be what Lord Chesterfield characterized a Christian gentleman, viz., the "highest style of man" in moral and mental sense, judgment and education and he should be honored, respected, self conducted and paid accordingly.

LAY ALERTNESS TO PROPHYLAXIS. "Prophylaxis: The General Movement to Prevent Disease," is the caption of which the following is the context in the *Censor*, of St. Louis.

"The intelligent part of the world is doing some double-handed thinking just now on the question of prophylaxis, or the means of preventing disease. Attention is called to the frightful loss of life through easily preventable accidents.

"There is no question that the waste of life through diseases which might easily be prevented, did we display a civilized interest in such things, is very great. Science is doing a splendid work in that great campaign, which, there is no question, will finally end in the absolute triumph over disease—in a day which will proudly look back on this and all other generations in which men suffered from disease, as ages of barbarism. One of the most important events in human history was the

discovery of the cause of yellow fever, ranking second to Jenner's vaccinative modification of smallpox; the discovery of the hookworm, which destroys the usefulness of millions of people, together with its remedy, is a triumph of the last ten years.

"More and more it penetrates thinking people that one of the most imperative needs of modern education, is fuller and more emphatic instruction as to sanitation, hygiene and especially prophylaxis. It should be drilled into the people that the superlative duty of life is to be strong, and conversely, that all wrong, all crime, all pain, all sin, can be reduced to a common denominator—weakness. Health is the basic principle of physical strength, therefore to be healthy is man's highest duty. We are accustomed to deal with various manifestations such as crime, sin, immorality, suffering and want, as first principles, when the fact is that these and most other things result from weakness."

This written by a lay periodical shows salutary progress in ideas of disease prevention among the newspapers.

When the public acquaints itself with and removes, so far as it may and can, the causes of disease, then disease and death will reach a marvellous minimum compared with what now exists among civilized peoples.

HOGARTH'S LINES OF GRACE in woman's animate form, the joy of artists and sculptors and inanimate, admired even by the medical student at the table of the cadaver, has become the theme of controversy between theologians and the ladies of St. Louis. The entrancing lascivious poetry of motion is exhibited in the diaphanous costume dance of Isadora Duncan.

The ladies call the Duncan movements on the stage absolutely perfectly beautiful, like some wonderful nymph in the forest. The clergymen call them unchaste, vulgar and demoralizing—"Honi soi que mal y pense." Men and women look upon naked women differently and at different times in life. "There could be nothing immodest in anything so idealistic" to a lady of refined taste nor to many men perhaps far past the age of puberty. Such dancing is high art and esthetic to some. But bare armed, bare legged, bare footed

and clad in a sort of ancient kirtle so diaphanous that in certain changes of the stage light she was virtually naked on a public stage before a promiscuous audience of all ages and both sexes ought to justify the protest of the preachers.

Sexual appetite is kept too erethistic and erotic pruriency is overfed already by theatres and shows for the welfare of the race, especially the young in America. Erotopathy is thus fostered to an unhealthy degree and fatal instability in the sexual sphere developed. This should be guarded against in the care of the people.

Psychologically speaking for the good brain and mind tone of all their normal erotic stability, we should say there be a limit to the terpsicor and Venus especially before the over young in public audiences. The ladies may think the objections to the Duncan dance were too attenuated and not well taken, but then the Duncan raiment was itself rather attenuated for a public show. It was extremely gauzy, what there was of it.

NEW USES OF ANATOMY.—Lofty ideals and new conceptions of the uses of anatomy appear in a lecture by Professor Campbell Geddes, of the Royal College of Surgeons of Ireland, to be found entire in the *Dublin Journal of Medical Science* and referred to in an abstract in *The Hospital*, London, from which we also abstract in brief, for the edification of the readers of the *Alienist and Neurologist* who may not have access to these excellent medical magazines.

"Geddes holds that there is a definite anatomico-pathological correlation in the human body which only needs working out to be recognized. He suspects with almost equal confidence what he calls his 'anatomical-pathological system' possesses a clinical extension of vast importance. * * * * * He gives examples. * * * 'From the type and method of growth of the hair it is sometimes possible,' he says, 'to accurately estimate the efficiency of the suprarenal bodies and the liver, and from the proportional length of the limb bones of an adult it is possible to judge of the activity of the reproductive glands.' * * * * * 'Among other anatomico-pathological observations, he has noticed an unusual develop-

ment of subcutaneous veins across the sternum in the subjects of pulmonary tuberculosis. Believing that this is not a consequence of the disease, but rather a cause, or at any rate the result of some other abnormality which renders vulnerable the individual possessing it, he would lay down a rule that any such patient, who can be shown to possess also any other abnormal anatomical peculiarity which is evidence of predisposition to morbidity, should be treated in some way to prevent tuberculosis. This is Professor Geddes' conception of the aim of scientific anatomy.' * * * * This is indeed a lofty ideal."

THE BURDEN OF UNCOMPENSATED EMERGENCY MEDICAL SERVICE should not be permitted to fall as now on the medical profession. The public should consider the doctor, his needs and just claims and more than equally divide with him the burden of the care of the indigent and the accidentally hurt. Time and service are money to the physician as well as to others and officials and the people should so regard it.

A convenient physician can not well decline an unexpected sudden call for relief when indigent humanity in his vicinage suffers or is dying, even though he lose time valuable and demanded in office or elsewhere. The public treasury should be open and at his command for reasonable compensation for such service. The physician should not be coerced to be the vicarious unpaid philanthropist for the public at large. The public has no more right to make the medical profession carry its burden of charity in this respect than in any other. Physicians more than any other class have their own personal burdens of charity to carry towards the impecunious who have been once well to do and paying patrons. Even their prosperous patrons too often put upon physicians the burden of the medical care of poverty-stricken relatives, not even sharing the burden of the time and money lost in their care, whereas they only exact of their grocer, baker, tailor, etc. a reduction, not always even to the cost of what they furnish.

The relation of the people to the medical profession in this and in some other respects, like that of the heathen Chinese toward us, is peculiar.

THE SECULAR PRESS AND SANITATION.—It is a hopeful sign for better health and longevity to see the newspapers and magazines becoming actively interested in health matters, especially in regard to the dust danger, as appears in this paragraph note from the *Cleveland Leader*:

Modern doctors, modern hygienists, modern voices, scientific and less so, have told us that the germs of tuberculosis exist in ordinary dust and float in ordinary air. We have learned within these few years that the cure for consumption is the breathing of pure air. We have learned as a corollary—one that may well have exchanged places with the original theorem—that to prevent consumption we must do the same thing—inhalé air that is free from germs.

Therefore, the street cleaners are—or can be—our saviors. As our streets are kept clean, so shall our bodies be kept free of disease. The abolition of municipal dust means the minimizing of urban illness. This means also antiseptic sprinkling of street dust and dust piles. The human street sweeper should be considered likewise.

Now if the papers would only take up the subject of psychic sanitation and help the medical profession in its endeavors to prevent the propagation of idiocy, epilepsy, insanity and the idiotic and insanoid conditions all too common in our social, business, political and even too often apparent in some church spheres of action, they would add much to public, family and individual welfare. Healthy, vigorous, steady brained minds, are much needed in this remarkable country where every man, good, bad or indifferent mentally, is a sovereign, with the right to vote unless he be so feeble minded or insane as to be generally recognized as lunatic or idiotic.

SCHOOL REFORMS NEEDED.—But it is certain that if the three R's were restored to their former importance, many fads and fancies would be given up as fads and fancies in actual courses of study and replaced more profitably in other ways. Take, for instance, physiology, upon which much stress is laid in these days. It is an important subject, concerning which every child should have some fundamental instruction, but it is not necessary to spend years in studying it from text-books.

An illustrated lecture of half an hour each week by a competent physician would be of far more value than the books now studied. It seems a fact that the children gain little practical benefit from this study at present.—From "What Is Wrong With Our Public Schools," by Joseph M. Rogers, in February *Lippincott's*.

If to this be added an all-round, though cursory, knowledge of hygiene against germ poisons about them and enough sound nervous system pathology sufficient to enable the children as they grow up to understand what their nervous system stands for and the importance of avoiding nervous unbalance in themselves and of not mating with it in after life, much misery would be avoided and much saved to their lives and for the good of humanity at large and the State in which they are to live in particular.

DREAMLAND AND INSANITY.—"We have just had related to us a distressing case of insanity in which the unfortunate man imagined he possessed occult power, and that his enemies were hypnotists. In going through his effects it was found that he was a "graduate" of a correspondence school of magnetic healing and was accredited with wonderful healing virtue. Another 'diploma' declared he was a made-by-mail hypnotist and capable of manifold stunts of entertaining and healing. Numerous kinds of new thoughts and cooked-over occultism, commercialized esoteric specialties, spiritualism up to date, oriental mysticism and all that line of flubdub were represented in a miserable lot of well-thumbed magazines and booklets, most of which endeavored to assail medicine and medical men."

Abstract from J. J. Taylor's editorial in the *Medical Council*.

These illusions may have first been taken up by a failing brain and mind simply adding fuel to the delusional flame development. Much of this hallucinatory stuff, "such as dreams, are made of" originates in brains weakened and minds impaired, even among those who resent suggestions of insanity as applied to them and their unreal cults and morbid fancies.

LET US RECLINE MORE.—Mr. Lane in "*The Hospital*," calls attention to the disadvantage the individual experiences from the habit of keeping the trunk constantly erect—a habit enforced by the condition of civilization existing at the present day. Europeans no longer recline as the ancients did, for chairs have taken the place of couches. The Anglo-Saxon, too, has given up squatting like the savage or the Bengali. And so all day long gravity is exerting an uninterrupted—an unfairly uninterrupted—downward pull on the viscera of civilized occidentals, and the bracing pressure of the front of the thighs never comes to the aid of the abdominal muscles.

This continued upright attitude and our modern lavatory conveniences have something to do, too, with constipation, hernia, and perhaps appendicitis through too prolonged pelvic bowel stasis of which we hear so much more now than formerly, when in this country at least it was the habit to go out and squat in the fields or behind the barn in the morning or evening after meals, assuming an attitude which presses the groin and inner side of the thighs against the pelvis and abdomen.

THE BARBARIC CARE OF THE INSANE IN CERTAIN AMERICAN ALMS HOUSES is the theme and protest of Dr. Arthur P. Herring, Secretary of the Maryland State Lunacy Commission in *Pearson's Magazine* which should be read by everybody who may influence a display of modern civilization humanity toward these unfortunates.

The author "does not wish to be understood as criticising state institutions," but here is his just conclusion about the defective desolate damnable poor house provision for the helpless pauper insane of the city, state and county alms houses:

"To-day a large number of insane negroes of both sexes are herded together in a dirty, dark, foul smelling room. They are given practically no treatment."

"I do wish to call public attention to the ignorance or the mere perversity of many legislators in refusing to appropriate sufficient money to at least house the insane in state institu-

tions. When the niggardly economy or economic parsimony of a state compels those who are mentally sick to remain in dungeons, it is a remarkably sad commentary of that civilization of which we so proudly boast."

WAS OR IS NORTH POLE SEEKER, DR. COOK, INSANE?—"Dr. Frederick A. Cook's story of the discovery of the earth's apex was the result of polar insanity, according to the Right Reverend B. E. Rowe, Episcopal Bishop of Alaska. Addressing an audience at Trinity Cathedral, Jan. 13th at Cleveland, O., he said that both Cook's remarkable story and Robert E. Peary's frame of mind upon hearing that story can be readily attributed to the loneliness, the grayness and the silence of the North." He said further "All men come from out the polar circle with their nerves shattered and in Alaska we send home fifty men, usually, after the long winter with their minds damaged by the extreme cold and trial of the North pole conditions of existence."

If Dr. Cook was not made insane by the trials of his trip to the North Pole, he has encountered enough since he came out of that region to unsettle the equilibrium of a fairly strong mind, especially if superadded to a dash to the pole and back. The last word concerning Dr. Cook has not been said.

SICK SAVING CHARITY.—Three million dollars have lately been bestowed in this direction, viz.: Rockefeller's million for searching out and eradicating the hookworm disease, Carnegie's pellagra million and Mrs. Sage's tuberculosis million.

Now let a dozen or more millionaires bestow a million each to promote the eradication and prevention of the growing neuropathy and psychopathy and the United States will be on the way to reasonable health. A few millions devoted to the prevention of the neuropathic and psychopathic states underlying pauperism, crime, vagrancy, the *Wanderlust*, epilepsy, insanity, idiocy, inebriety, etc. would be money well spent, especially if the expenditure developed a sentiment against physically and morally defective marriages and propagation of degenerates and the properly applied and lawfully regulated oophorectomy and vasectomy of the unfit for progeny.

THE TONGUE, THE PULSE AND THE BLOOD.—We would not disparage biological chemistry nor zoological experiment, nor pharmacology, nor experimental therapeutics any more than we would coarse and microscopical anatomy, but to be expert in handling the sphygmograph and the sphygmomanometer and other means of record or vivisection or original experimentation in the laboratory is not so essential in practice as physical diagnosis, hematology and the proper visual, chemic and tactile estimation of tongue in relation to autotoxicity, etc. or pulse to arteriosclerosis, etc. Though valuable in a course of instruction, the bedside and the clinic beat the laboratory in practice. Consider all around chemic and biologic suggestion, but regard well the vitality and symptom syndrome of your patient. The tactus eruditus and the clinical thermometer also count for much in practice.

PARANOIA ANGELICA.—The number of paranoiacs believing themselves to be heaven favored and angelic is not insignificant and mental aberrates, not religious, sometimes think they can and sometimes attempt to fly with extended arms or artificial wings. Before the dirigible airship became practical, lunatics, not religiously paranoiac, have attempted to fly.

But a West Virginia pious or affectedly pious hermit (W. H. Ledsome by name) is reported from Parkersburg as having concluded several years of pious preparation for death with the preparation of a winged white shroud, the wings being those of a large turkey from his own barn yard. After some objections by the undertaker, his relatives had him buried in this unique costume of angelic and probable paranoiac suggestion. Similar freaks of mind are peculiar even to such minds as are not intramural to asylums for the insane.

THE ADVANTAGE OF SELF-SHAVING TO THE PHYSICIAN.—Dr. Charles A. Pope, the eminent physician, surgeon and early Dean of the Faculty of the St. Louis Medical College, now merged into the Medical Department of the Washington University at St. Louis, used to advise medical students to shave themselves, for the manual dexterity in the handling of sharp instruments and the skill of avoiding unnecessary cutting it

would give them. He thought self shaving would contribute to make them cautious as well as bold in their surgical work. He advised courage, boldness and steadiness in going only to the spot requiring surgical remedy and going no further. To be skillful self shaving would contribute to make them safe, sure and steady handed and these make a trinity of memorial axioms for the aspiring surgeon.

FIRE AT THE JACKSONVILLE, ILL. CENTRAL HOSPITAL for the Insane on the night of December 21st last destroyed the roof of the Annex, entailing a loss of about thirty thousand dollars, but no loss nor injury to the 180 female patients, owing to the prompt and effective working of the institution fire drill.

The fire started at eight o'clock in the evening on the third floor. Some of the patients had to be carried out by the attendants, but all were brought down the main staircase in perfect order, without confusion and uninjured. They were immediately and comfortably housed and cared for in the chapel and amusement hall. The restoration of the burned building is begun. Good management over there.

HYGIENE FOR PSYCHOPATHY.—"Uncinariasis and pellagra are now receiving much public attention as the result of popular articles published in the monthly magazines and liberal sums are being devoted to the work of prevention." Likewise tuberculosis, for which the New York Medico-Legal Society and the National Tuberculosis Society are entitled to much credit.

Now let the public get possession of the idea that psychopathia with its annual enormous crop of idiots, imbeciles, insane and insanoids, needs to be corralled and exterminated. Then oophorectomy and vasectomy rightly regulated will not be regarded as "cruel and unusual punishment" under medical wise precautions and legal restriction.

NEW YORK SKIN AND CANCER HOSPITAL announces that Dr. L. Duncan Dulkey will give an eleventh series of clinical lectures on diseases of the skin in the outpatient hall of the

Skin and Cancer Hospital commencing Nov. 3rd, free to the medical profession.

Why not free to the profession and public? The more the medical profession enlighten the public the better it will be for both. We are suffering now from light concealed in the fads, foolish notions and blunders of the people on medical subjects. Why not emulate Harvard's public lecture on medical subjects example?

PSYCHIC RESISTANCE TO TUBERCULOSIS.—*The Alienist and Neurologist* would plead for a sound psychiatry in the tuberculosis crusade. It is well that people should be concerned and bestir themselves for the eradication of this omnipresent plague of civilization, but not that they should be needlessly alarmed. It is spread not by infection from the person so much as by contagion of contaminated sputum, drinks and foods.

A good resistance in nerve center tone, right metabolisms and blood cell quality count for much in fighting off tuberculous infection.

PELLAGRA AND THE S. C. HEALTH BOARD.—The South Carolina Board of Health showed such a commendable public spirit in calling a national conference on pellagra as will tend to bring the medical profession to the front in the esteem of the public, where it belongs. The program was lengthy, interesting and valuable.

One of the papers, Dr. Turner's, of Dallas, Texas, presented the neurological aspects of the subject. The psychological side of pellagra is a very important one, worthy of further investigation.

THE ST. LOUIS REPUBLIC has formulated a Century Club. It is old enough to be heard on this subject though it speaks with all the vigor of youth. It still has the vigor of youth and the wisdom of age in its editorial utterances and it is not too old to stoop to pick up pearls of news.

The editor of this magazine has read this excellent daily for over fifty years, as his father read it for a quarter of a century before him.

May the *Republic* "live long and prosper." Its life has been fair and honest.

JOHN D. ROCKEFELLER'S HOOKWORM DONATION is, in the direction of hygienic rescue of the southern people from the hookworm disease, a million well bestowed. Now Andrew Carnegie imitates Rockefeller's example in another million looking after the eradicating of pellagra and blessings be on the heads of both. Carnegie could only do better by providing for his superannuated and accident damaged or overworked broken steel company employees. The medical profession and the people thank all such humane benefactors.

THE APPOINTMENT OF DR. FRANK PARSONS NORBURY to the superintendency of the Kankakee Illinois Hospital for the Insane is a good one, in line with right medical needs of such institutions for men of special familiarity with the care and treatment of the insane. Dr. Parsons fills the requirements as medical men understand them, as to moral, mental and medical fitness for the position. We congratulate the state and institution and presage a successful administration of its affairs under his superintendency.

HOLBEIN'S DANCE OF DEATH comes to us with the compliments of the Maltzyme people. We do not know why this ghastly subject is selected in connection with the advertising of Maltzyme. In fact the dance of death seems *malapropos* in this relation. We note also that death in this sombre series does not seek either the physician or the beggar. Probably there is no use for these "over there" in death's domain with the angels.

The Annals of Surgery completed its fiftieth volume last December with a jubilee number. Its cosmopolitan character is shown in the list of contributors, by leaders of England, Scotland, Denmark, France, Italy, Hawaii, Canada and the United States. Twenty-two articles form a 400-page number. The illustrations, some colored, make up this jubilee number. The Lippincott's publish it.

Hippocrates, a new medical journal in Constantinople, will devote one department to ancient Greek medical literature, bringing out original studies and researches by Greek physicians of Greece, Turkey and Egypt.—*Penn. Med. Jour.*

The Alienist and Neurologist would gladly exchange or its editor pay subscription price for this periodical. Ancient Greek medical literature should be better known to moderns.

THE NEXT CENSUS.—Relative to the Thirteenth Decennial U. S. Census of population, etc., it is hoped that the same may be as accurate and trust-worthy as possible and we hope that all readers of this magazine will co-operate to the utmost to make this census as complete as possible. Let us all do what we can to add to the thoroughness of the important approaching decennial enumeration which begins next April.

THE EARLY CASE OF SUSPECTED LEPROSY has not reflected especial brilliancy upon the diagnostic ability, according to Dr. L. Duncan Buckley's showing of American health authorities, as readers of the *Alienist and Neurologist* may see by reading "Leprosy and Twentieth Century Civilization" in the *Medical Times* for February.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will hold its thirty-sixth annual meeting, Hotel Pontchartrain, Detroit, Mich., Sept. 13, 14 and 15, 1910.

THE A. M. A. meets at St. Louis June 7th next.

OBITUARY.

WILLIAM CHRISTOPHER KRAUSS, born in Attica, N. Y., October 15, 1863.

After graduation at Cornell and Bellevue Hospital Medical College, the University of Berlin gave him Magna Cum Laude with the degree of M. D., in 1888. He then made a special study of nervous diseases in the great medical centers of Europe. With this splendid equipment, the young physician came to Buffalo in 1889, at the age of 26.

Knowing but few people, it is astonishing to recall his rapid progress in his chosen field. Niagara University made him professor of Nervous Diseases, the different hospitals in the city appointed him neurologist upon their staffs. Three medical journals—*Neurologische Centralblatt*, *Journal of Nervous and Mental Diseases of New York*, and the *Buffalo Medical Journal*—made him associate editor. He was a member of numerous medical and scientific societies, among them being the American Neurological Association, the American Public Health Association and The Royal Microscopic Society of London. He was the President of the Board of Managers of the Buffalo State Hospital.

This statement gives us an insight into the busy life of Dr. Krauss. He had no spare moments, no play time. He was always giving the best there was in him to his professional work. His activities were varied and constant. Much of his time was devoted to medico-legal work. He was very often called to testify as an expert in insanity and nervous diseases, in civil and criminal cases, in the courts of Western New York. To all of these cases he devoted himself with unflagging energy. His testimony was always given in a manner so convincing that he impressed everyone that he firmly believed that his cause was just. As a consultant he was in frequent demand, as great reliance was placed by his brother physicians upon the thoroughness of his examinations and the accuracy of his diagnosis. But it was in the quiet of his library that

the doctor did the work which suited him best. He was devoted to his studies. There never was a time when he was not engaged in writing upon some scientific subject. In 1907, he translated from the German, "A Text-book of Psychiatry," by Prof. Mendel, of Berlin. In the past twenty years he wrote nearly two hundred papers on neurological and psychiatric subjects. He completed, just before his death, the manuscript of a book on "Tumors of the Spinal Cord."

The social side of life was not neglected by the doctor. He was a member of many clubs and societies and always did his share in making them successful. His life was one of usefulness. He was justly regarded as one of the strong men of his profession.

He married Miss Clara Kreiger, of Salamanca, N. Y., in 1900. Their children were Magdalene, Alma and William A.

J. W. PUTNAM.

With regrets at his untimely demise and condolence with the family of the deceased we mingle our approval of Dr. Putnam's tribute above and add our approval of the worth of our dead friend. The last time we saw Dr. Krauss was at the Amsterdam Congress and on the voyage on the same steamer, the Ryandam, to New York. Parting with him at the dock at Hoboken we little thought that the parting was to be the last. In his death the medical profession has lost a zealous, faithful, efficient worker, humanity a devoted friend and we an esteemed colleague.

IN MEMORIAM.

DR. JAMES CARROLL.—Last November Baltimore unveiled a bronze tablet to the memory of Major James Carroll, M. D., in the Hall of the University in Baltimore. Dr. Carroll, who died in 1907, was an alumnus of the University of Maryland. He was one of the physicians who submitted to the bite of the yellow fever mosquito, thus contributing to the world's present exemption. *The Maryland Medical Journal* gives Dr. Carroll's description of his inoculation by an infected mosquito as follows:

"The insect, which had been hatched and reared in the laboratory, had been caused to feed upon four cases of yellow fever, two of them severe and two mild. The first patient, a severe case, was bitten twelve days before; the second, third and fourth patients had been bitten six, four and two days previously, and their attacks were in character mild, severe and mild, respectively. In writing to Dr. Reed on the night after the incident, I remarked jokingly that if there were anything in the mosquito theory I should have a good dose, and so it happened. After having slight premonitory symptoms for two days, I was taken sick on August 31, and on September 1, I was carried to the yellow-fever camp. My life was in the balance for three days, and my chart shows on the fifth, sixth and seventh days my urine contained eight-tenths and nine-tenths of moist albumen. The tests were made by Dr. Lazear. I mention this particularly because the results obtained in this case do not agree with the twentieth conclusion of Marchoux, Salimbeni and Simond, that the longer the interval that elapses after infection of the mosquito the more dangerous he becomes. Twelve days, the period above cited, is the shortest time in which the mosquito has been proved to be capable of conveying the infection. It is my opinion that the susceptibility of the individual bitten is a much more potent factor in determining the severity of the attack than the duration of the infection in the mosquito or the number of

mosquitoes applied. On the day that I was taken sick, August 31, 1900, Dr. Lazear applied the same mosquito with three others to another individual, who suffered a comparatively mild attack, and was well before I left my bed. Thus it happened that I was the first person to whom the mosquito was proved to convey the disease. On the 18th day of September, five days after I was permitted to leave my bed, Dr. Lazear was stricken, and died in convulsions just one week later, after several days of delirium, with black vomit. Such is yellow fever."

PROF. A. MARIE WOUNDED.—A former patient at the Villejuif Insane Asylum returned after his discharge and shot the physician-in-chief, the eminent alienist, Prof. A. Marie, recently, one bullet entering the chest and another the thigh, but neither doing much harm. Both bullets were removed at once, and Marie is not considered in danger. He recently assumed the editorship of the *Archives de Neurologie*.

CORRESPONDENCE.

RESOLUTIONS as adopted by Chic. Med. Soc. in reference to the A. M. A., Jan. 11, 1910.

WHEREAS, the Chicago Medical Society is an integral part of a constituent society of the American Medical Association, and therefore vitally interested in the welfare of that great organization, and

WHEREAS, certain conditions exist which menace the best interests of the members of the American Medical Association, and of the profession at large;

THEREFORE, BE IT RESOLVED, that the Chicago Medical Society in council assembled recommends the following changes in the policies and management of the American Medical Association, viz.:

1. The laws should be so amended that no one person will be permitted to hold, at the same time, more than one executive or honorary office in the Association.

2. The office of general secretary, and the positions of editor and manager should be separated, and no person should be permitted to fill more than one of these places at one time.

3. The number of trustees should be increased.

4. All officers and employees whose duties involve financial responsibility should be bonded.

5. The laws governing admission to membership in the American Medical Association should be so amended as to make it mandatory upon the secretary to enroll applicants who have complied with the provisions of the by-laws governing the same.

6. Space should be set apart in the Journal for free and courteous discussion of the policies and methods of the Association, or for any other matters which may appeal to the membership at large as bearing upon the interests of the Association.

7. Provision should be made for the initiative and referendum.

8. No member should be expelled from the Association without a fair trial and full hearing.

9. No person who is a general officer or member of the House of Delegates or Board of Trustees or employe of the American Medical Association shall be eligible to serve as a general officer or member of the House of Delegates or Council of any constituent association.

10. BE IT FURTHER RESOLVED, that the secretary of the Chicago Medical Society be instructed to publish these resolutions in full in the bulletin of the society and to transmit a copy of the same to the Journal of the American Medical Association and to the editors of the various state journals.

AN OLD LETTER FROM DR. JOSEPH WORKMAN OF TORONTO.

A Commendatory and Incidental Tribute to Archibald A. Riddel, Tamburini and Marchi.

We are prompted to give to the many readers of the *Alienist and Neurologist* who "in that older day" so heartily appreciated the contributions, original and translated, (mostly from eminent Italian neurologists and alienists) one of the many personal letters of our earlier guide, philosopher and talented friend, Dr. Joseph Workman, of Toronto, so long the eminent worthy medical head of the Toronto Hospital for the Insane. Though many years gone from earth the psychic aroma of his sweet and pleasant personality, like the fragrance of a broken vase, once the container of sweetly odorous flowers, abides with us still though the roses are crushed and the vase is broken.

Toronto, 24th, Dec. '83.

DEAR DR. HUGHES:—I duly received your post card of 13th. I had then commenced translation of Golgi's continuation—I fear it will tire your readers more than it did me. The text requires the aid of the plates, for it is not possible to do justice to the anatomy of the brain in mere words, and in

truth Golgi is by no means the clearest of writers, but your confrere of the M. T. and G. will most probably ascribe all obscurity to the translator and thus exhibit his critical acumen and large erudition. You forgot to return to me the clipping which I sent you from that good-natured notice of the A. & N.

I wish you would tell your printer that I do not wish his compositors to undertake any amendments of my spelling in such words as fibre—centre, &c., &c. In my school days we did not write *fiber—center*, &c., &c., and it sets my teeth on edge to see my youthful reminiscences maltreated. I therefore hope you will *favour* me by requesting your devils to *endeavour* to adopt more considerate *behaviour* towards my not very illegible mss. I don't care a kick of a lame louse for your Websters and Worcesters. I am not one of those who feel ashamed of "auld lang syne."

I presume the dose I sent to you four days ago will serve you for 3 months at least. The article of Tamburini and Marchi is good.

I last week attended the funeral of a much valued old friend, Dr. Archibald A. Riddel—whom I had known intimately for nearly 40 years. He was a man of unswerving truthfulness and probity, but not smooth enough or bending to conciliate friends among the lovers of soft words. I never knew him to fail in telling me my faults or concealing his approval of my virtues. I did not of late years like him the less for being a warm admirer of you and a strenuous advocate of the insanity of Guiteau. For 8 years past I have never passed a week without visiting him at least once—often twice or thrice, and in his last illness daily—so you may well imagine how sadly I now miss him. He was my junior by 14½ years. I now meet very few of my own age. I realise that loneliness which admonishes of transition "to the majority." We have passed through a cold snap, but two weeks later than last year. I see, however, that in New England the temperature has been far lower than here. My coldest at 8:00 A. M. on 22nd was 2° above zero, but almost every other place in Ontario was from 5° to 15° lower.

I have intimated to Rumbold* that I fear my health will prevent me sending any more translations. He has one, however, which he will probably spread over three numbers—a sort of splitting which I much dislike. I am at present engaged in a revision of a translation which I made two years ago of a long poem in Danish by Molbech. I do not attempt to rhyme, but my blank verse is a close and just rendering of the original no doubt too literal for the M. T. and G. man, but nobody outside my own family and one or two lovers of Scandinavian literature will see it. I am very thankful for such a pleasing resource—it sweetens time and softens sorrow, I think, too, it makes me a better as well as a happier man. Remember me kindly to your dear wife, and permit me to wish to you both and all your little circle a happy Christmas and many a good new year. I may not often again have this pleasure.

Truly,

JOSEPH WORKMAN.

TREATMENT OF PELLAGRA.—Much interest has been aroused during the last two years in the subject of pellagra. A study of the disease in the United States has thus far shown that it is widely distributed throughout the South, and present in some localities in the North. The question of prognosis and treatment is naturally, therefore, one of much interest. Dr. C. H. Lavinder, of the Public Health and Marine Hospital Service, who for more than a year has been devoting his time to a study of the disease, has in a recent article given a brief review of the subject.

He states that the prognosis must invariably be considered as grave, and that complete recovery can seldom be assured. Reliable statistics on the subject in the United States are practically limited to asylum cases, and give a mortality of 67 per cent. It must be borne in mind, however, that asylum cases are undoubtedly the more advanced and hopeless ones,

*Dr. Rumbold then published the *St. Louis Medical and Surgical Journal* and Dr. Workman had done some general medical translation and thought of doing other similar work for him.

and for that reason will give a mortality much above the average. Lombroso gives statistics of hospital cases in Italy in 1883 and 1884, showing a mortality of 13 per cent., whereas Wollenberg gives Italian statistics for 1905 showing a mortality of a little over 4 per cent. The disease resembles tuberculosis, both in that it is an insidious and chronic condition, and that much depends upon early diagnosis and treatment, prognosis of early cases being far better than advanced ones. The importance of this is apparent when it is considered that the disease is an intoxication, and that it is probably associated with diseased corn or corn products used as food.

Predisposition is believed to be an important factor in this disease. Lowered physical resistance, mental worry, insufficient food, bad housing and alcoholism are supposed to render one more susceptible.

In Italy laws have been passed regulating the use and storing of corn and its derivatives, institutions have been established for the care and treatment of pellagrins, improved agricultural methods are encouraged, and assistance is given to the sick in many ways by the government.

In the treatment of patients Lombroso recommends a liberal diet; in some cases he uses baths and cold douches, believing them to be of benefit in certain cases with nerve and skin manifestations; he has found arsenic a valuable remedy, and sodium chloride of service.

Some authors have reported good results from the use of the newer arsenical preparations, atoxyl and soamin.

Transfusion of blood from cured cases to the sick has been tried and may prove of value.—*From the office of the Surgeon General, P. H. and M. H. S.*

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

A MIND THAT FOUND ITSELF, AN AUTOBIOGRAPHY. By Clifford Whittingham Beers. Cloth, pp. 363. Price, \$1.50. New York, Longmans, Green and Co., 1908.

This book appears to be the product of a brain in which the morbid egoism of an uncured insanity yet abides with the writer and in which, in retrospect, the delusory exciting impressions of a morbid state of mind are reproduced as complete verities.

The fading fancies of oncoming convalescence are given as real facts ignorant of the possibility of his having been deceived by that morbidity of brain which often abides long after recovery is set in with the insane, who finally get well.

It was a book like this written by a paranoiac in a latent interim of apparent sanity that unjustly assaulted a good institution and a good hospital superintendent and brought about enactments harmful to the interests of the insane which after bitter and embarrassing experience, had to be repealed for the welfare of the insane of the State of Illinois.

This recovered(?) patient unlike most of the hundreds we have seen go through the process of complete recovery and get entirely well, does not question the reality of his impressions during his recovery, many of which must have been imperfect and misleading, but talks with confidence and condemnation on the methods that brought about his cure. This is not the manner of speech of the grateful hundreds whom we have seen recover of this great affliction during our four decades and over of experience in and observation of their care both in and out of hospitals.

He has no praise, but censure, contrary to the testimony of so many others similarly afflicted and experienced, for "the

bridge that carried him safely over" his grave malady. His censorious criticism of his treatment appears like the yet abiding morbid antipathy of an imperfectly recovered patient and most of all this dislike of the hospital, so unusual in fully recovered patients, was reproduced in a medical review by the *Journal A. M. A.* as if it were all and only unilluminated truth.

The psychic ambliopia that comes with mental convalescence seems not to have been taken account of either by the author of this book, which is of course pardonable, nor by the reviewer, and the latter is not excusable for assenting to the verity of evidently delusional statements of a recovering insane person, even though that person writes a book which is far from evidence of sanity. We are not sure from the tenor of this book that the author's mind has entirely found its former absolutely normal self. The reading of the lunatic at large might enlarge the reviewer's judgment upon this matter.

Many minds once insane and discharged too soon from hospital care think they are entirely recovered, in whom morbid impressions still abide, and want to write and denounce and do denounce their saviors in the asylum who a few weeks later on change their minds, if convalescence becomes complete, and praise where they wanted to blame. Some of our own former recovered patients, too early sent home, have told us this. We knew less then than now about practical psychiatry and were more anxious then for records of prompt recovery. It is a good plan to wait awhile after convalescence sets in in insanity before discharging the patient as recovered.

THE AUTOBIOGRAPHY. A comprehensive study of the origin, motives, ideals and historical importance of this branch of literature. By Anna Robeson Burr, 451 pages crown octavo. Houghton, Mifflin and Co., 4 Park St., Boston and 85 Fifth Ave., New York. Price, two dollars net, postage fifteen cents.

One of the most interesting developments of literary study in recent years has been the scientific study of literary types,—their essential nature, their historic development, and their points of permanent human interest. In this book Mrs. Burr

presents comprehensively and entertainingly the field of autobiography. She presents her subject both historically and psychologically and enters into the different motives which have led men to write autobiographies and into the words, manners and methods of the autobiographers she discusses.

The relation of the autobiography likewise to different times and countries is considered and showing, for instance, by graphic tables and diagrams, how the autobiographic impulse has been affected by the condition of the nation's affairs. The work is an important contribution to the history of literature and psychology, fresh, suggestive and significant.

In this direction the psychologically analytic contributions of Kiernan and Ireland to the *Alienist and Neurologist* are pre-eminently meritorious.

The alienist and neurologist and unclassified dilettante will enjoy this book. The author reveals an acquaintance with autobiographic and historic literature quite as extensive as her linguistic knowledge, which comprises five, at least, of the principal modern languages.

MORPHINISM AND NARCOMANIAS FROM OTHER DRUGS, THEIR ETIOLOGY, TREATMENT AND MEDICO-LEGAL RELATIONS. By T. D. Crothers, M. D., Supt. of Walnut Lodge Hospital, Hartford, Conn., Editor of the *Journal of Inebriety*, Professor of Mental and Nervous Diseases, New York School of Clinical Medicine, etc., Philadelphia and London, W. B. Saunders and Company. Price, cloth, \$2.00 net.

This book emanates from a source of ample clinical experience with the malady upon which it treats and will prove interesting and instructive to the habitue, the physician and the literateur and the savant in psychopathic science.

The jurist, too, may glean something of value from this book for the drug taker is here medico-legally considered, even to the shop lifter in connection with opium.

The cases recorded in this book are related often also to wills and contracts and vice. The cigarette fiend, tobacco generally and cologne narcosis here claim the author's attention, based on personal observation and experience, the whole book being, as the author states, in his note of acknowledg-

ment, the practical summary of his clinical experience of over a quarter of a century of active care and treatment of narcomaniacs.

SPONDYLOTHERAPY: SPINAL CONCUSSION AND THE APPLICATION OF OTHER METHODS TO THE SPINE IN THE TREATMENT OF DISEASE. By Albert Abrams, A. M., M. D., (Univ. Heidelberg) F. R. M. S. Cloth, 420 pages, 100 illustrations. The Philopolis Press, Lincoln Building, San Francisco, Cal.

The book will interest thinkers in medicine here and elsewhere, especially in regard to tumors of the spine, sacroiliac disease, typhoid spine, psuedo appendicitis, vaso-motor pathology, psuedo mastoiditis, postural lung dullness, kidney reflexes, segmental algeries, stomach percussion, intestinal splenic kidney reflexes, coccygodynia and many other subjects. The book is unique.

This valuable book dedicated to Dr. Pierre Marie in recognition of his distinguished services in the advancement of medicine, aims to show the value of spinothrapy, though the author does not designate his spinal concussions as such and seeks to explain all there is of value from the rational anatomical physiological facts in osteopathic and chiropractic procedure and to show the rational limitations of the pretentious claims of these limited methods of therapeutics.

A TEXTBOOK OF NERVOUS DISEASES. By William Aldren Turner, M. D., (Edin.) and Thomas Grainger Stewart, M. B., (Edin.) P. Blakiston's Son and Co., 1012 Walnut Street, Philadelphia, Pa. 607 pages illustrated.

This book is from two good authors and one of our best medical book publishing houses. Its illustrations and the text are beyond adverse criticism. The familiar nervous diseases are well portrayed in verbal descriptions and pictured illustration, especially amyotonia and the hysterical flaccid paralyzes and contractures. Skew deviation in cerebellar lesion tumors of the choroid, involving the lateral and tumor of the third ventricle spreading to the fourth are features of this valuable book, along with illustrated in-

termedullary tumor of the cervical cord and the description of the pituitary body tumors.

These and the brain tract illustrations and relations and the classic organic nervous diseases, neuroses and neurasthenia, are other features of this interesting treatise making it worthy of a space on the library table or shelf of any physician.

NOTES ON TWO HUNDRED CONSECUTIVE CASES OF ACUTE MANIA TREATED WITHOUT SEDATIVES. By C. K. Hitchcock, M. D., M. A., Medical Superintendent York Lunatic Asylum.

A good showing from a competent source of right clinical experience in psychiatry, nevertheless we have found by similar experience in psychotherapy that it is best in many cases to conserve the wasting wear and tear of the psychic neurones where and when change of environment and removal from all home exciting causes and the soothing warm bath do not promote nocturnal brain tranquilization sufficient to promote adequate amount of recuperative sleep.

The last eight hours of each day at least in acute mania should be ones of chemically enforced brain oblivion by whatever means this recuperative sleep may be accomplished and in the meantime as more tranquilization and diversion from delusion as may be secured to the patient.

EXPERIMENTAL STUDIES IN PSYCHOLOGY AND PEDAGOGY.

Editor, Lightner Witmer, University of Pennsylvania.

Two Experimental Studies of the Insane, The Train of Thought, Some Physiological Conditions Accompanying States of Depression.

These two studies by Clara Harrison Lonn, Ph. D., resident psychologist, Friends' Asylum for the Insane, Frankford, (Philadelphia) Pa., will interest every reader of the *Alienist and Neurologist*.

These are studies in association with mental concentration, perception, reflection, spontaneity, continuity and psychic endurance. They show psychasthenia in all the experiments and raise the question as to the proper limit of duration of these mind trials from a psychotherapeutic standpoint, *i. e.*,

the point of view of the patient's welfare and our desire for psychologic knowledge.

DEPARTMENT OF COMMERCE AND LABOR, Bureau of the Census, E. Dana Durand, Director, Bulletin 104, Mortality Statistics: 1908. General death rates, causes of death—occupational mortality—second decennial revision of the international classification of the causes of death. Government Printing Office, Washington.

All this ought to be put out by a National Health Department or the United States Marine Hospital and Public Health Service. It is a sad commentary on the lack of influence of the medical profession in the affairs of the nation that so important a matter as the public health should be distributed around among departments that are not primarily or essentially health departments. This backward state of sanitary affairs shows lack of medical unity and influence and right public appreciation.

PUBLICACOES DO "BRAZIL MEDICO." Ataques epileptoides produzidos pelo uso do brometo de canfora. Pelo Prof. Dr. A. Austregesilo.

A good and timely contribution to an important subject. The reviewer has seen a bilateral epileptoid seizure, with transient unconsciousness, clenched fists, thumbs turned in, spasmodically closed jaws and conjugate eye deviation, from a single drachm of the official tincture camphor U. S. P.

THE NEEDLESS SLAUGHTER IN TYPHOID FEVER: THE RATIONAL TREATMENT FOR THE DISEASE MAKES THE DEATH RATE ALMOST NIL. HYDROTHERAPY AND THERAPEUTIC FASTING SOLVE THE PROBLEM. By Charles E. Page, M. D., Boston.

An excellent showing for the *vis medicatrix naturae* and the expectant plan of treatment.

VALUE OF SIGHT IN SUPRAPUBIC PROSTATECTOMY. By Follen Cabot, M. D., New York, attending genito-urinary surgeon City Hospital, etc., post-graduate.

A Study of the Anatomic Relations of the Optic Nerve to the Accessory Cavities of the Nose. By Hanau W. Loeb, St. Louis.

This painstaking neuroanatomical study will interest all readers of the *Alienist and Neurologist*. It is a study creditable alike to the able author and profitable to neuro-anatomical, neuro-physiological and indirectly to neuro and cerebro-psychic neurotherapy.

The Journal of Pharmacology and Experimental Therapeutics, Volume One, May, 1909, Number One, edited by John J. Abel of the Johns Hopkins University, in association with eminent collaborators, has an interesting table of contents and will prove of undoubted value to medical science, especially in its clinical therapeutic aspects.

"Up to the present time pharmacologists and students of experimental therapeutics in this country have published their work in journals devoted to other experimental sciences, but the activity of investigators in these fields would now appear to justify the existence of a separate journal. It has been decided, therefore, to found a journal in which may be published the results of investigations in the closely related subjects of pharmacology and experimental therapeutics" and the present projectors have begun the work well.

The War on Consumption and Recent Health Notes from the Virginia Health Bulletin. The table of contents and illustrations show what is being done in this state for the cure and eradication of this scourge. This and other states are awaking to the duty of the day regarding this scourge of humanity.

Lipoma of the Larynx. By M. A. Goldstein, M. D., St. Louis, from the *Laryngoscope*.

It is a gratification to the editor of the *Alienist and Neurologist*, a native St. Louisan, to see the evidences of increasing work and medical writing ability in St. Louis, of which this interesting and instructive paper is part evidence.

Points in the Anatomy and Surgery of the Hard Palate of the Infant. By Vilray Papin Blair, M. D., St. Louis.

This is a well illustrated, interesting and instructive showing of this important subject. It is gratifying to our local professional pride to know that it emanates from a St. Louis surgeon.

Suppurative Accessory Sinus Diseases in which an Intranasal operation is indicated. By Hanau W. Loeb, A. M., M. D., St. Louis.

Any medical man studying and desiring to thoroughly understand intracranial morbid states makes a mistake by throwing literature like this in the waste basket.

Rachitic Erosions of the Permanent Teeth Associated with Lamellar Cataract. By I. A. Abt, M. D. and Mortimer Frank, M. D.

The Diagnosis of Diseases Affecting the Pylorus, Duodenum and Bile Passages. By Louis M. Gompertz, M. D., New Haven, Conn.

A Critical Study of the Sensory Functions of the Motor Zone (Pre-Rolandic Area); More Especially Stereognosis. By Herman H. Hoppe, A. M., M. D., Cincinnati.

Announcement of a Course in Tropical Diseases and Medical Parasitology to be given in the Oakland College of Medicine under the direction of Dr. Creighton Wellman.

Chronic Constipation Clinically Considered. By Louis M. Gompertz, M. D., New Haven, Conn.

The Prognosis in Locomotor Ataxia. By Wharton Sinkler, M. D., Philadelphia, Pa.

The Ninth Commencement of the Lakeside Hospital School for Nurses.

Congenital Syphilis in Infants. By Isaac A. Abt, M. D., Chicago.

An Inquiry into the Status of the Kindergarten. By Isaac A. Abt, M. D., Chicago.

Merck's Annual Report of Recent Advances in Pharmaceutical Chemistry and Therapeutics.

New Jersey Training School for Feeble Minded Girls and Boys. Twenty-first Annual Report, 1909.

Search for Truth among Eliot Ruins and the Church of the Bible. By John C. Havemeyer, New York.

The Gouty State, 25c. W. J. Morrison, 43 Brood St., N. Y. C.

The Quarterly Bulletin of Northwestern University Medical School, Chicago, Ill.

39th Annual Report of the Central State Hosp. of Virginia, (Petersburg) for year ending Sept. 30th, 1909.

Albany Hospital, 7th Report of Pavilion F., Dept. for Mental Diseases, 1909.

112th Annual Report of the Board of Managers of the Maryland Hosp. Insane, 1909.

Report of Board of Managers, Springfield State Hosp. of Maryland, 1909.

The State and the Death-Roll. E. E. Rittenhouse.

The Prognosis in Locomotor Ataxia, Wharton Sinkler, M. D., Philadelphia.

75 Cases of Trifacial Neuralgia Treated by Drugs, Injections of Alcohol. Hugh T. Patrick, M. D., Chicago.

Dr. Patrick makes quite as good a showing on the subject as any of our foreign confrères and a very satisfactory one for the remedy.

30th Annual Report State Hosp. Insane, Norristown, Pa., 1909.

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PUBLISHER'S DEPARTMENT.

MEDICAL SERVICE IN THE FRENCH FOREIGN LEGION.—Dr. F. J. Conzelman translates for the Military Surgeon. (Muench, Med. Wochenschr., No. 50, 1908).—The French Foreign Legion is organized according to French model; that is, for each regiment there is one regimental surgeon, several major surgeons, and a number of assistant surgeons. The infirmerie or hospital militaire corresponds to the German revier and has about seventy beds. The hospital consists of one sergeant, one corporal, one pharmacist and a number of poorly informed attendants or "infirmiers." Owing to the lack of training of the infirmiers, many astonishing errors are committed in the administration of medicines. The author, whose name is not given, informs us that one infirmier gave a sick soldier 30 grams of quinine hydrochlorid instead of 30 grams of magnesium sulphate; the result was complete deafness and blindness; another dressed a wound with pure carbolic acid, and a third made a quinine injection in the gluteal region with diluted hydrochloric acid.

The daily sick report fluctuates; there are between 50 and 80; of these 25 to 30 are venereal diseases; 10 to 15 malaria; 2 to 5 typhoid fever and the rest "non-malade."

The medical examination is very superficial. In the absence of fever the soldier is classed "non-malade." A temperature of 39.5 Centigrade does not excuse the soldier from duty.

Gonorrhoea is treated with injections of permanganate solutions; the syringes for this purpose are unsuitable and the soldier, as a rule, is not excused from duty.

The soft chancre is treated with pure lemon juice, three times daily; this treatment is exceedingly painful. Inunctions

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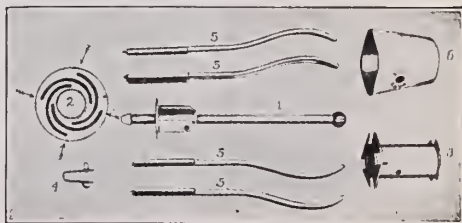
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or injections or bichloride of mercury is the treatment for syphilis.

The way to have good soldiers is to give them good treatment, sick or well, not only from a physical, but from a psychical standpoint. The day of the martinet and of official indifference to the welfare of the common soldier, sick or well, is passing and will be soon past in our country.

Cases operated upon for intestinal perforation in typhoid fever, 60 per cent. were cured; some of these were retained in the service and the rest were discharged as unfit for duty, without reward or pension.

Stimulants, as wine and milk, usually never find their way to the patient, but are used by the attendants, and the medicine is frequently sold to civilians. It is a common saying among French soldiers: "Rather three months in the Sahara than two weeks in the hospital."

THE STERILIZATION OF CRIMINALS and other defectives by vasectomy is the title of a leaflet published by the Chicago Society of Social Hygiene, founded under the auspices of the Chicago Medical Society. Prominent members of the medical profession, university men, judges, bishops and others are identified with this society, its aims and its objects. These are, plainly, the restriction of procreation of irresponsible parasites on society from such sources as natural criminals, imbeciles, insane and epileptics.

Amongst the few States that have taken any steps in this direction is notably Indiana, which some two years ago legalized vasectomy of these mentally defective classes. In this State alone over 800 confirmed criminals have thus been sterilized, 200 on their own request. Similar bills have been introduced in two or three other States. Five States (Minnesota, Connecticut, Kansas, Michigan and Ohio) forbid the marriage of feeble-minded, epileptic and insane women under the age of 45 years. Marriage is, however, not essential to procreation.

Unlike castration, it is urged in favor of the operation of vasectomy, that it is trifling, without pain or danger or im-

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For Nervous and Mental Diseases, Drugs and Alcohol Addictions.

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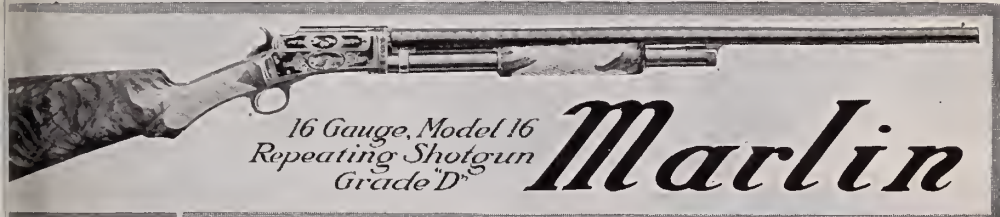
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Grade D

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The *Marlin* 16 gauge repeating shotgun is an exact copy of the *Marlin* Model 19 12-gauge and contains all the features

have made *Marlin* shotguns famous. The solid top, side ejection, automatic recoil safety and closed-in action are present in Model 16; part refined a little to meet the lighter charges used in a 16 gauge shotgun.

Grade D has fine Damascus barrel and Grade Model 16 *Marlin* shotgun barrels are made of special Smokeless Steel"; all *Marlin* barrels are able to shoot both black and smokeless powders.

The working parts of Model 16 repeating shotgun are made of the finest quality of steel drop forgings, cut down from solid blocks to the nicely fitting parts of the finished shotgun.

With one shell in the chamber and five in the magazine, Model 16 shotgun can be fired six times in four seconds.

For grouse, quail, woodcock, prairie chickens, teal, woodchucks, squirrels, rabbits and all other smaller game this gun is unsurpassed. The upland shooter will readily see the advantage of a repeating shotgun weighing a pound to two pounds lighter than the average 12 gauge and yet having all the effectiveness of the heavier arm.

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pairment of sexuality—it does not unsex the man. It effectually prevents procreation and appeals to the bodies of the mentally defective rather than to their feeble minds.

Of the three methods proposed to deal with these unfortunates—castration, colonization and vasectomy—it may be said of the first that it is a major operation, renders the individual impotent, and would be difficult to secure legal sanction therefor; of the second, often suggested, it may be said it would most probably be a successful bar to propagation, but the constant care and trouble of keeping colonized would prove a difficult problem; of the third, vasectomy, it is an office operation, effectually blocks the vas deferens, does not lessen sexual power or pleasure, and completely sterilizes.

The *Journal of the American Medical Association* recently wrote this sterilization of criminals by vasectomy is becoming a live question in many directions. It has been officially recommended to general attention by the Chicago Medical Society, the Chicago Physicians' Club, the Southern District Medical Society and the Chicago Society of Social Hygiene.

A communication from the latter was presented before the Executive Council of the Canadian Medical Association in Winnipeg in August, which communication was ordered filed.—*Dominion Medical Monthly*.

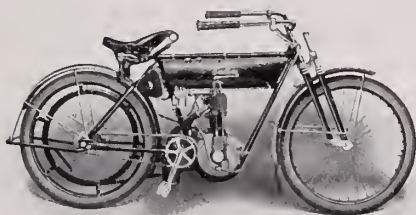
AT THE RECENT WORLD'S CONGRESS.—The teaching of temperance in public schools, life insurance and temperance, the treatment of the inebriate, as well as the economic and legal aspects of alcohol, were discussed by prominent lawyers, the Lord Chief Justice, prominent railway officials, officers of the Army and Navy and others. One of the most prominent general discussions took place on "Alcohol and the efficiency of the national services." It was shown that there was an extraordinary growth in total abstinence in the British Army and Navy; in the army in India forty per cent. are total abstainers, no doubt due to improvements made in the environment of the soldier, particularly in housing and food.

The Congress was held under the auspices of the British Government, and pretty nearly all civilized countries were

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officially represented. The number in attendance was 1,400.
—*Dominion Medical Monthly.*

APROPOS OF DR. LEONARD WOOD'S RISE, Dr. S. H. Melcher, formerly of New Hampshire, now of Missouri, brevetted lieutenant colonel for bravery on the field, is worthy of mention. He was medical examiner of volunteers for

Courthouse on left is the only building on the square of "war times" remaining. Was used as hospital for wounded and sick soldiers in 1861-5. During the summer and fall of 1861 was filled with Wilson Creek wounded, in charge of Surgeon S. H. Melcher. Was one of the five hospitals during the winter of 1862-3 whence volunteered more than four hundred convalescents, which, with the company of citizens and an improvised battery of three old iron cannons, chained to wagon wheels, formed the "Quinine Brigade" under Surgeon Melcher, and assisted in the successful defense of Springfield, on the memorable 8th of January, 1863.



Missouri, surgeon in chief of the United States Marine, Hickory St. and McDowell's prison hospitals at St. Louis during the civil war, and the editor's senior medical officer, to whose medical position the editor in part succeeded.

AMERICAN EXPOSITION IN BERLIN THIS YEAR.—America is to have a comprehensive and representative Exposition in Berlin in 1910. Manufacturers and business men throughout the country are displaying a lively interest in the undertaking. Every branch of American progress will be shown at the Exposition. What are the American medical, dental and pharmaceutical professions doing in the premises?

"As this will be the first all-American Exposition ever held in a foreign country, it will be of interest to all Europe as well as to America."

TO MAKE RADIUM.—Radium is to be manufactured on a commercial basis in a new factory which will begin operation next year in London. The foundation stone of this home of the world's most precious commodity has been laid in Limehouse, East London, by Lady Ramsay, wife of the discoverer of radium, Sir William Ramsay.

By a secret process of Sir William Ramsay's invention, the radium will be produced within eight weeks from the pitchblende, which means about one-fifth of the period at present occupied in manufacture.

From five to ten grammes of radium is all that Sir William hopes to be able to produce during the year. The present price of radium is \$90 a milligramme, or \$2,500,000 an ounce.

A NEUROLOGIST'S SIGN IN PORTUGAL.

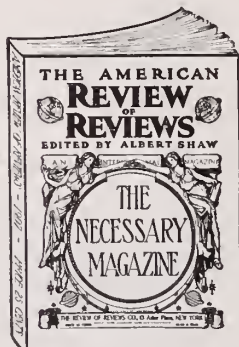


"In Portugal it is quite the custom for physicians to place over their office conspicuous signs."—*Hospital Notes*.

WHY USE MORPHIA?—The Antikamnia people make the following sensible and apropos remarks on a great and growing evil among self prescribing laity therapeutists. Of course this chemical company has a business motive in the following true note of warning, but even popular antikamnia self pre-

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scribing cannot prove so harmful as the opium habit engendering use of morphia.

The practice of using morphia for simple pains and neuralgias of different varieties cannot be too strongly condemned. As these preparations afford speedy relief, it is taken for granted without any further consideration, that they are precisely what the condition requires, and patients fly to their use on the slightest provocation without consulting their physicians at all. Such persons, long before they recognize the fact, learn to rely unconsciously upon morphia for relief, without realizing that they thus slowly drift under its pernicious influence, and in a short time absolutely require the drug habit independently of the original condition which induced its use.

In almost all the cases of pain, except perhaps, those of the gravest surgical character, the judicious exhibition of one of the approved derivatives of the coal tar series will be found amply sufficient in its anodyne and analgesic character to obtund all of the pain symptoms.

FROM FREIHERR VON KRAFFT-EBING, Professor of Nervous Diseases at the Royal University of Vienna, Austria.

"Freiherr von Krafft-Ebing desires to state that he has used Fellows' Syrup of Hypophosphites for a number of years, and that he has obtained very good results from this tonic, especially in neurasthenia and in conditions of mental exhaustion."

Dr. Milner Fothergill wrote:

"The combination (Fellows' Hypophosphites) is an excellent one—the best yet made—to my knowledge. It is a happy thought.

"It is a good all round tonic specially indicated when there is nervous exhaustion. It is readily digestible, and has given much satisfaction in my experience of it."

Dr. J. Nowack, Professor at Royal University, Vienna:

"If a dose of the Syrup is administered in a glass of wine or water an hour before going to bed the patient goes to sleep quietly without any excitement. I can recommend Fellows' Hypophosphites to all medical men in cases of sleeplessness."



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modern, carefully conducted home sanitarium, with spacious surroundings, and attractive drives and walks. Electro- and Hydro-therapeutic advantages are unexcelled. Trained nurses, hot water heat, electric lights. Special rates to physicians. For reprints from Medical Journals and full details of treatment, address

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In gynecological practice, Peacock's Bromides has a large field of utility, particularly in cases of uterine congestion and nervous dysmenorrhea, and for the relief of the nervous excitement and irritability so frequently met during the menopause. In these conditions it controls the abnormal reflexes without depression or gastric disturbances.

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Composition: each fluid drachm contains fifteen grains of the neutral and pure bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

"NOTHING NEW UNDER THE SUN."—This saying of Solomon comes to the mind of "*Therapeutic Medicine*," in the following: Van Cott, of Brooklyn, in the leading editorial in the June *New York State Journal of Medicine*, points out that the work of Paul Ehrlich, Eli Metschnikoff and A. E. Wright, which has formed the basis of our present knowledge of the nature of immunity to infectious diseases, has taken its concepts from the old humoral pathology and the later cellular pathology.

Van Cott alludes to this fact at the beginning of his article and closes with these words: "The present tendency of scientific opinion is towards the belief that the processes of immunity consist in a combination of the phenomena comprehended in the doctrines of the humoral and cellular pathologists."

IN THE TREATMENT OF EPILEPSY, both grand mal and petit mal, in neurasthenia and hysteria, in neuralgias in general, and in the functional and organic disturbances of the cerebro-spinal axis, Hydrocyanate of Iron and its combinations are be-



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ing used with admirable results by many of the leading neurologists of the day.

If you are not familiar with this valuable prescription, send to the makers for clinical reports. The old reliable house of Tilden Company have introduced many excellent preparations and the profession have come to know that their label stands for quality.

DOCTORS VERSUS LAWYERS.—Most lawyers take a keen delight trying to confuse medical experts in the witness box in murder trials, and often they get paid back in their own coin. A case is recalled where the lawyer, after exercising all his tangling tactics without effect, looked quizzically at the doctor who was testifying and said:

"You will admit that doctors sometimes make mistakes, won't you?"

"Oh, yes; the same as lawyers," was the cool reply.

"And doctors' mistakes are buried six feet under ground," was the lawyer's triumphant reply.

"Yes," he replied, "and the lawyers' mistakes often swing in the air."

POETRY OF MIND CURE THREE HUNDRED YEARS AGO.

'Tis mirth that fills the veins with blood,
 More than wine, or sleep, or food;
 Let each man keep his heart at ease;
 No man dies of that disease.
 He that would his body keep
 From diseases, must not weep;
 But whoever laughs and sings,
 Never he his body brings
 Into fevers, gouts, or rheums,
 Or ling'ringly his lungs consumes,
 Or meets with aches in the bone,
 Or catarrhs, or griping stone,
 But contented lives for aye;
 The more he laughs, the more he may.

Beaumont and Fletcher, 1635.

—*Southern California Practitioner*, 1910.

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GIFTS FROM MILLIONAIRES.—It is said that Mrs. Russell Sage is shortly to announce a gift of \$1,000,000 in aid of the methods for establishing a cure for tuberculosis. The fact that John D. Rockefeller has given \$1,000,000 to aid the work of eradicating the hookworm has raised the hope that Andrew Carnegie may conclude to make a substantial contribution to government health work.

With individual contributions of like magnitude from Mrs. Sage for arresting the progress of tuberculosis, and from Mr. Carnegie and others, the public health service looks forward to substantial results at an early date.—*Globe-Democrat*.

A PSYCHOTHERAPEUTIC INSTITUTE.—*The Boston Medical and Surgical Journal* announces that Mrs. Martha S. Jones, of Boston, Mass., has given her extensive estate and parks near Portsmouth, N. H., as a gift to Dr. Boris Sidis, of Brookline, Mass., for the purpose of establishing a private hospital to be named "The Maplewood Farms, Sidis Psychotherapeutic Institute," in which modern methods of psychopathology and psychotherapeutics will be employed in the treatment of functional nervous diseases.

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HOSPITAL SWALLOWED IN THE EARTH.—Associated Press news comes from Vienna, Feb. 5, of an extraordinary catastrophe at Raibl, Carinthia, when the local miners' hospital, a two-story building, was suddenly swallowed up in the earth, and out of sight with seven occupants, including a patient and the family of Dr. Wessely, the resident surgeon.

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No. 2.

POSSIBILITIES OF DEVELOPMENT FOR MENTAL DEFECTIVES AND THE STATE'S CARE OF THEM.*

BY MARTIN W. BARR, M. D.,

Chief Physician Pennsylvania Training School for Feeble-
Minded Children, Elwyn, Pa.

BEFORE considering the many possibilities for the development and betterment of the feeble-minded, possibilities demonstrated and proven in a century of progressive experience, it may not be uninteresting to give a backward glance at the first efforts that have led to such encouraging conditions. Leaving the somewhat legendary and apocryphal attempts of St. Nicholas of Myra in Asia Minor, and of St. Vincent de Paul in France, directed chiefly toward rescue and protection, we find in the case of the Wild Boy of Aveyron the first definite scheme of education formulated for the awakening of backward intelligence.

It was in 1798 that this child apparently, about 12 years of age, was found by some sportsmen, hunting nuts and acorns in the woods of Caune, in the department of Aveyron.

*Read before the Philadelphia Pediatric Society, March 22nd, 1910.

Described by Professor Bonaterre as unaccustomed to our food; selecting his aliment by the sense of smell; crawling on all fours; lying flat on the ground and immersing face to lap water; fighting and biting in efforts to escape; tearing any garment put upon him; having no articulate language; giving no sign of intelligence beyond a placid complaisance upon receiving a caress; Bonaterre yet thought that this phenomenon might furnish to philosophy and to natural history important notions on the original constitution of man, and on the development of his primitive faculties.

Itard—Physician to the School for Deaf Mutes in Paris—an enthusiast in the new school of physiologic education, then being carried forward by Abbés Sicard and de L'Épée, was at once interested in the boy as a subject for experimentation. Taking him for a pupil, he devised for him a program which should lead by the exercise of the senses to the awakening of the emotions; a program designed to cover all steps from savagery to civilization, and gradually to the full development of normal powers.

But Itard failed to recognize that imbecility which both Bonaterre and Pinel had warned him might be there. It was therefore but natural that after five years of unceasing toil his bitter disappointment in hoped-for results should find vent in the words: "Unfortunate! Since my pains are lost and my efforts fruitless, take yourself back to your forest and primitive tastes; or if your new wants make you dependent on society, suffer the penalty of being useless and go to Bicêtre, there to die in wretchedness." His truest consolation might have been found—had he but known it—in the fact that his intense sympathy and interest in his pupil had led him, unwittingly, to modify his methods to meet the needs more of the defective than of the savage for, as the endorsement of his work by the French Academy reads: "It presents a combination of highly instructive processes, capable of furnishing science with new data, the knowledge of which can but be extremely useful to all persons engaged in the teaching of youth," which word of prophecy was more than fulfilled.

Edouard Seguin, the interested pupil and co-worker of Itard, recognizing the value of his methods for the development of defective intelligence, opened in 1837, a private school in Paris for this avowed object. Modifying and adapting principles with such success as to win the commendation of Esquirol, he was called in 1842 to the directorship of a school for idiots which had been previously organized at Bicêtre by Ferrus in 1828.

Building upon Itard's methods for the awakening of the emotions through the exercise of the senses, adding to it Locke's theory of the connecting link between sensation and idea, Seguin gradually formulated a program which, verified in Paris, he later brought to America and lived to see it the fundamental principle governing the development and training of mental defectives throughout the world. It involves the careful diagnosis of physiologic and psychologic conditions, the development and strengthening of faculties and aptitudes or, as necessity may indicate, the restraining of certain instinctive and moral tendencies. These all combine to form a basis upon which others entering into his labors have builded upon and enlarged continuously.

Thus a study of functions and aptitudes, and the enlisting of the emotions, has revealed manual training applied in many ways as ability may indicate, to be a superlative motor in the development of mental defectives, while a prolonged observation of instinctive and moral tendencies shows a predominance of the former over the latter, amounting in many cases to absolute exclusion of the moral sense necessitating constant and life-long surveillance and protection.

As schools for the feeble-minded have multiplied and increased with population, varying from ten to one hundred and even to the thousand mark, individuals of similar aptitudes have been massed, separating the trainable from the untrainable, until a clear-cut grouping, according to ability and with corresponding occupations provided, has become the natural result.

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BACKWARD OR MENTALLY FEEBLE.
Mental processes normal, but slow
and requiring special training and
environment to prevent deteriora-
tion; defect imminent under slight-
est provocation such as excite-
ment, over-stimulation or illness.

From this it will readily be seen that a correct diagnosis is of primary importance. Family history and causes hereditary or accidental, should be carefully noted, and, as upon physical efficiency depends mental potentiality, every sense avenue is interrogated and tested. When, in accordance with this, the untrainable idiot with no articulate speech and no power of consecutive thought is remanded to nursery care in asylum together with his brother, the idio-imbecile, whose very limited advance in mentality will admit of his being trained to assist in his care; and the trainable imbecile is grouped in classes and work shops, then, and then only, can the work of the teacher and the physician unite on practical lines.

It is with the Imbecile in three grades that the schools are occupied, and just here it should be clearly understood that the terms Low, Middle and High are not associated with promotion or advancement as in the schools for normal children; but signify simply the quality and status of the individual, his possibilities, his limitations and consequently determines almost unfailingly his life-work and, moreover, indicates the training for it; not by any hard and fast lines, but by a general mapping out of means that, suited to his needs, will best insure his development.

The Low-grade Imbecile, capable of advancement from *mere improvement to actual training*, is a step in the ascending scale from the idio-imbecile, chiefly noticeable in faculty for articulate speech in short half-expressed sentences, but with little added power for consecutive thought. Unable to comprehend artificial signs or symbols, he never learns to read or write, and numbers for him have no meaning

beyond the very simplest counting; but by means of physical exercises that arouse, and of occupations that interest, the arm, the hand and the fingers may be enticed into such movements as the kindergarten provides, which if co-ordinated and persisted in, may in time make such a mental impression as to insure success in one routine; either the simplest manual employments of knitting, weaving or basketry, or the industrial occupations. Such, trained as aids in farm, garden or household service, may become in time (under direction always), excellent servants.

The Imbecile of Middle-grade—for whom the working hand makes strong the working brain—is capable of acquiring some knowledge of the three R's, which he can apply only to a very limited extent; but manual training is for him the open sesame to the treasure-house of life. He can learn to utilize tools with facility—to do honest work, and to do it well.

High-grade Imbeciles who approach more nearly normal conditions are capable of pursuing the intermediate course in the public schools, and may be fitted through the medium of the arts and crafts, for *certain* responsible occupations demanding more complex thinking. These may be brought to do excellent work as musicians, cabinet-makers, carpenters, printers, type-writers, tailors and seamstresses—always under direction.

With methods of training embodying more or less of this classification the large training schools of to-day present a community of workers; farm, garden, house, kitchen and laundry having each its corps of busy aids, as have also the various trades of shoe-making, tailoring, dressmaking, carpentry and printing. A trained choir leads in the religious services, while a band, orchestra and chorus, and in many schools a trained company of actors and athletes, provide amusement and entertainment for all. It is in this quiet routine—this regular alternation of work, rest and amusement periods—that the imbecile finds his only safety.

The boys who go out into the world find this routine and the discipline so necessary to them, only in an army-post or in the marine corps; and some few have been fortunate

in enlisting. The majority of the girls, however, drift inevitably to ruin. The homes are unequal to the task of either stimulating or compelling and more than one poor soul returns gladly to the institution he was once so eager to leave, with the exclamation: "I can't get along. Somehow they don't understand me!" Others soon drop out of the race and the unequal competition with normal, drifting into the dependent, or the criminal ranks. This is unfailingly the fate of that class of moral defectives found in all grades of imbecility; developing in the lower the bestial qualities—in the higher that skill and duplicity, making veritable artists in crime. There must be the ever-compelling hand keeping him up to the maximum of endeavor, lest through apathy or indolence he develop insanity or degenerate into idiocy.

Equally, there must be the watchful guarding from excess of any kind and the safe-guarding from temptation.

In the training schools which are veritable homes for children all this and more can be managed for him. Out in the world, according to opportunity or proclivity, or too often from inherited propensity, he is sure to become the victim of the vicious into whose toils he will often fall from sheer loneliness—a feeling he is unaware of in a community of his fellows, where not only is he protected from vice, but society from the inevitable increase in which he will be a certain factor.

It is absurd to speak of cure. Defect is not disease, as is insanity, and even when brought to its best condition, that irresponsibility—the unfailing characteristic of this perpetual childhood—precludes permanent success in anything. Without the sustaining and protecting hand he will fail sooner or later, bringing disaster to himself and others. Protection there must be; for the imbecile from the world, and for society from him, for this whole matter of transmission of ill cannot be too carefully guarded against.

The influence of our methods upon public education is evidenced in the recognition of Backward Children, and the special schools furnished by Boards of Education in most of our large cities for their benefit. This, as has been clearly

demonstrated, is a class not actually defective, but so handicapped by undeveloped conditions from causes inherited or accidental, that defect is imminent upon any provocation incident upon illness, shock, over-stimulation or prolonged fatigue. For these, after careful preparation and given opportunity for quiet selection without excitement, many avenues open and they may, after passing the critical stage, enter the arena of life normal men and women; whereas, without such recognition and provision, they must sooner or later join the rank of defectives.

The value of such schools, therefore, cannot be too highly estimated; as a means of lessening numbers it must in time aid largely in the work of prevention.

It is estimated that there are in round numbers ten thousand avowed cases of mental defect in the state of Pennsylvania. Of these the state makes provision for only 2,500, or a little over one-fourth—leaving the remainder, 7,500, either at large or dependent upon municipal or private provision.

The State Institution for Western Pennsylvania provides for some 1500 and the Eastern Institution at Spring City for 300, while some 700 are in the Training School at Elwyn, a private corporation with provision for 1100, which is at present overcrowded.

It is greatly to be desired that the State may, in the near future, make more adequate provision for both protection and prevention, and that too, along lines of massing and grouping such as experience has already proven most practical, as well as most economical, giving Asylums for the idiots and helpless classes—which, needing only nurses and creature comforts, may be managed on comparatively inexpensive lines; Custodial Institutions for moral imbeciles, with suitable occupations—thus withdrawing numbers from the criminal ranks; and Training Schools, from which laborers and artisans may be drafted, reducing largely the expense of maintenance, these provisions accentuated and strengthened by the two essentials—asexualization and permanent sequestration.

IS GENIUS A SPORT, A NEUROSIS, OR A CHILD POTENTIALITY DEVELOPED?*

BY JAS. G. KIERNAN, M. D.,
CHICAGO.

Fellow Chicago Academy of Medicine, Foreign Associate Member French Medico-Psychological Association; Honorary Member Chicago Neurologic Society, Honorary President Section of Nervous and Mental Disease Pan-American Congress 1893, Chairman Section on Nervous and Mental Diseases American Medical Association 1894; Professor Neurology Chicago Post-Graduate School 1903; Professor of Nervous and Mental Diseases Milwaukee Medical College 1894-5; Professor of Nervous and Mental Diseases Illinois Medical College 1905; Professor of Forensic Psychiatry Kent-Chicago College of Law.

AN important phase of adolescence is afforded by the distortions of the secondary ego which appear particularly, as George A. Coe has pointed out, in a morbid conscience. This, he remarks,[†] is a special feature of the reflectiveness, introspection and self-criticism that tends to set in somewhat preceding the advent of puberty. The absorption of the child-consciousness in objects now gives place to self-consciousness destined soon to become most intense. Heretofore the child has taken himself objectively. But now he discovers himself, and this self is a quivering mass of sensibility. The things about him also get an inner side now, and it is their ultimate principles and their hidden relations to him that interests him. He can no longer take things as they appear; nor can be taken anything for granted; much less can he believe anything merely because other persons do so. Nothing short of absolute,

*Continued from the *Alienist and Neurologist*, Feb., 1910.

†*Child Study Magazine*, 1897.

indubitable truth, the true inwardness, the complete subjectivising of everything, will satisfy him. Nothing less than absolutely right principles of conduct can be right at all, and everything in himself that falls short of absolute demands is hateful to him. Heretofore, moral law has been an authority imposing itself upon him from outside; now he discovers that the law speaks loudest within him. Heretofore right conduct has consisted for him in obedience to formal rules; now he begins to inspect the rules themselves, and to find within himself something more exacting and terrible than rules.

It is now that he becomes a conscious logician. The passion for argumentation takes possession of him. He will settle everything by the most rigorous thought. He becomes a remorseless critic. There is simply no limit to his captiousness and censoriousness. The least slip in pronunciation, the least infelicity of rhetoric, the least fault in dress, in manners, or in conduct, is seized upon wherever found, and playmates, teachers, pastor and parents pass under the rod of his scorn. Then appear excessive pride and conceit, self-will and rebellion against authority. But all this time the youngster has been applying the same merciless process to himself. He debates with himself, he criticises himself. The childish "why" which used to be asked out of a kind of playful curiosity now appears as a matter of life and death. And because the "why" of things does not respond to his insistent questioning, he becomes burdened with a sense of the mystery of things and of life. Why was I born? What am I good for? he asks, and is in a fever of uncertainty. He may find relief in religion, or he may merely brood and worry; or he may take the road of doubt and skepticism. He finds that he can ask questions which no one can answer, and so he doubts. A boy of thirteen or fourteen confided to me that he doubted the existence of God because he couldn't see who made God. Even the religious-minded have their questionings and doubts, also. And so the absolute mystery of being presses upon the spirit and crushes it.

Of course, this is not the experience of all, but some-

thing like this is likely to occur whenever the ordinary excitableness of adolescents is abnormally increased. We shall not go far astray if we say that the transition from childhood to full membership in society includes a tendency on the part of the child-consciousness to lose its original unity and become more or less broken up. It tends to become divided over against itself, becoming to itself at once law-giver and subject, critic and criticised, absolute and finite. It then unites strong self-assertion with self-distrust, and exaltation with self-abasement.

The biologic and sociologic interpretation of all this is plain enough. These are psychic signs of a change which in reality makes a human being more of an individual than ever before, yet more than a mere individual. Through the new and mysterious powers coming upon him he gains in individuality, yet since, at the same time, he is becoming an instrument of the race for its own conservation, he cannot be a mere individual. And so, while he passes from under the mere tutelage of social law, he approaches only so much the nearer to the awful seat of right and wrong.

It ought not to be wondered at if this momentous change should work temporary congestion and over-sensitiveness to right and wrong in all except the best endowed, nourished and envired. By over-sensitiveness of conscience I mean a sense of right and wrong so intense as to defeat instead of promote proper conduct. I should call conscience morbid when anxiety about doing right exhausts the energy that should go into action; or when trifles are magnified into monsters; or when debate with one's self as to what is right is carried so far as to paralyze decision. Using the term "thought" in a non-Shakespearean sense, we might say that conscience is morbid when

the native hue of resolution
Is sicklied o'er with the pale cast of thought;
And enterprises of great pith and moment
With this regard their currents turn awry,
And lose the name of action.

Here is a farmer's son who writes: "If, in plowing corn, I missed a weed, I could not bear to leave it and so often got off the plow and, going back, pulled it up. Sometimes

I became angry instead of going back, and then vented my rage on the horses, thinking that they had not walked as they should. Likewise in running a self-binder. I worked myself nearly to death changing the machine for 'up' and 'down' grain in order that *every* scrap should be gotten, and that every bundle should be bound *just a trifle* nearer the 'butts' than the heads. (*Italics are in every case his own*). If the horses went into the grain, thus causing the machine to run over some and leave it, I often went back and pulled it up, not to save it, but 'just for the looks of the thing.' I wanted everything to run *absolutely perfectly*, and if it did not I was perplexed and fretted."

Later, when the same young man was preparing for college, he neglected his health and his religious and social life, as he says, "all for the sake of being *extremely* accurate in unimportant details in geometry, Latin and Greek. Also, in writing essays, I have rewritten many pages rather than scratch out a misplaced dot or wrongly crossed 't'. During these two years, in no essay did I ever scratch out with a knife or otherwise *anything*, no matter how small, and *never* put in a word with a carat. If I made a mistake, I rewrote the whole page. Practically, after the age of nineteen I was not troubled with morbid conscientiousness."

Three things are noticeable in this account: First, the close affinity between this form of morbid conscientiousness and anger. It is a case of what is popularly called "nerves." That is, the nervous system, through the great tax placed upon it in this period of life, and through contributory causes, such as special fatigue and inadequate nutrition, is in unstable equilibrium and ready, upon trifling stimuli, to tumble over either in the form of anger, or of excessive feeling, or of motor discharges disproportionate to the occasion. Second, notice that over-sensitiveness of conscience coalesces with "showing off," thus revealing very clearly the sociological significance of the whole phenomenon. The boy was over-particular, not to save the grain, but "just for the looks of the thing." This is the startled response of one who hears for the first time the voice of the race speaking within him. Third, notice the exaggeration

of details, and the effort to reach the absolute in conduct. Everything is now put into one formula, "either—or." Nothing but the absolutely perfect is right; all else is wrong. The call of conscience comes to him in the form of law, pure and simple. Morality is as yet abstract and lacking in content. He has not yet grasped the notion of growth or becoming, nor seen that benevolence is the fulfilling of the law. Right here, no doubt, lies the root of much of the youth's anguish. The full *authority* of duty,

Stern Daughter of the Voice of God,

presses down upon his spirit; but it is a yawning emptiness which he seeks to fill by infinite yearnings and by absurd slavery to trifles.

Analysis of this case applies in large degree to many others. For instance, a girl of about a dozen years was plagued with over-nice conscientiousness about stealing. She would not take so much as a pin without permission, or if, when visiting any of her friends, she found it necessary to take one, she inflexibly compelled herself to tell the hostess, saying: "I took one of your pins." This was a very painful process to her, though she did not see the absurdity of it, but thought she was merely doing her duty. She had a similar over-wrought sense of the duties of politeness. She says: "On one occasion, a neighbor took me into her flower garden to pick me a bouquet. As she picked each flower, she put it into my hand, and each time I said, 'Thank you.' I was greatly embarrassed, but a sense of duty compelled me to keep on offering my gratitude for each separate flower, until finally the lady assured me that it was not necessary."

As one grows older, one is likely to become aware of the unreasonableness of such a conscience, yet may not be able to resist its commands. A young lady writes: "I have suffered at intervals ever since I can remember from what I consider to be a morbid conscience. However, my training has always been of such a healthy sort that now I seem to be outgrowing this tendency, and abnormal conscientiousness crops out only when I am in considerable physical fatigue.

. . . . The reason why I call these spasms of conscience morbid is because they seem to be a distinct hin-

drance instead of a help in doing what I believe to be right. I want to do right, my ideal of the right is very high, but with it all is a terrible sense of self-distrust. Instead of guiding self in the performance, conscience seems to dissipate, to scatter, all self's energy. This waste of energy is immense and the results painful. The last attack of this sort was when I was trying to write (a certain literary production). I had an idea which I wished to develop and express as well as possible. But the thoughts that arose were condemned as petty, as unworthy. The words that flowed from my pen were despicable. The structure seemed miserably weak. Decision, even on the most minute points, was well-nigh impossible. The experience was altogether painful and the struggle nearly fruitless; and all through it I was aware that it was abnormal; but that did not seem to help matters. I was overworked at the time. I should advise a good ten-hour sleep as cure for, or insurance against, attacks of this sort. I have always been extremely sensitive even of little frowns of disapproval, and from them have suffered cruelly as a child. This, I believe, is a mild case of morbid conscience."

In this case, which is doubtless typical of a large class, the sufferer is not deceived at all, but recognizes the fact that his feeling of right and wrong has become distorted. Another important fact here is the clear indication of the connection between morbid conscientiousness and fatigue. "I now," says the writer, "seem to be outgrowing this tendency, and abnormal conscientiousness crops out only when I am in considerable physical fatigue." The last attack came on when she was over-worked. Fatigue, however induced, is the neural basis of morbid conscientiousness. Experience in mature life witnesses to this fact. For when tired out we are often brought into a sort of slavery to our duties and especially to details; we are drawn in so many different directions that we do not know which way to turn, and we seem incapable of getting any task quite done. Under these circumstances small matters unduly excite us, sometimes when we are fully aware that there is no good reason for our agitation. With adolescents this condition may become

habitual and all absorbing. The victim becomes a slave of indecision. He sees considerations on both sides of every question of conduct, is harrassed by fear of deciding for the wrong side, and often ends by letting slip the opportunity for action. Then comes, perhaps, remorse and mental flagellation for his weak and vacillating character. One young man says: "I was troubled for several years by a lack of prompt decision, especially in small matters. If once I got to arguing with myself over a thing, I was likely to argue too long, and small emergencies were often too much for me. I derived the greatest help from learning to ride the bicycle when I was twenty years old, for in bicycle riding I found prompt and accurate decisions necessary, and apparently forced out of me."

This lack of decision is closely akin to certain incipient approaches to fixed or insistent ideas. A young lady who was much troubled in her early teens by an over-sensitive conscience tells me that, on one occasion, having been deeply impressed by the suicide of a neighbor, she conceived an overwhelming fear that she might kill her mother. It brought her into sharp anguish of mind for some days, when she found relief by confiding the trouble to her mother. A young man who, from the advent of puberty to the age of twenty-five, suffered from three distinct and serious attacks of nervous exhaustion, and each time endured torments from his conscience, experienced in one attack at least something approaching insistent ideas. As he walked along the street he felt that he must touch every post of the fence and not step on any crack in the sidewalk, and these were not mere passing whims, as they frequently are in childhood, but commanding ideas which wrung obedience out of him against his own judgment. The same youth had a consuming fear of hydrophobia. Something of the same sort is found in persons who lock and relock the door several times at night, being unable practically to convince themselves that they have already completed this duty. Such a person, though intellectually convinced of the folly of his acts, feels impelled to rise from bed again and again and examine the door lest he may possibly have made a mis-

take the other times. I have found this phenomenon present in many adolescents.

When morbid conscientiousness takes the direction of religion, it is apt to reach its greatest intensity. A young girl became a mental and physical wreck with the delusion in her head that she had committed the unpardonable sin, but was finally rescued by a woman who cured her by faith. This girl had always been very nervous and very religious. In other cases the morbid bent is merely toward doubt of one's religious state. The following account is from a young man: "When I was about twelve years old I began to assume the outward forms of a religious life. I met all the conditions of being a Christian as far as I understood them, and at fourteen joined the church. But from about this time until I was twenty I was constantly haunted by the thought that I did not know for sure whether I was a Christian or not. I prayed and read the Bible, and struggled bitterly with my secret doubts, though I hardly mentioned them to anyone else. There were times when it seemed to me that I would have walked into fire if such torture could have cured my mental agony. But all in vain. At last I became ashamed and disgusted, and decided that, having done my duty as far as I knew how, I would not be bothered any more. That ended it."

Occasionally the morbid conscience caricatures religion in still another way. A young man writes: "I must have been about twelve years old when I had, as I supposed, a religious change and joined the church. From that time for about five years I was continually in a state of unrest and trouble, magnifying, as I now think, perfectly innocent things into sins of the deepest dye. And, as I tried to bind myself down to a perfectly correct course, and, as a matter of fact, failed, I was continually in a state of remorse, and also continually thinking of myself and acts, till I came to be almost unbearable to myself. When about eighteen I was taken sick. . . . After my recovery I had lost all the supersensitiveness."

In still other cases the very conscientious youth is pestered with doubts concerning some part of the creed or

system of doctrine. Through his religious instructors or otherwise he has had it deeply impressed upon him that certain doctrinal propositions are true, important to his salvation and very sacred. The result is that the first rude, childish conception he forms of this doctrine fastens itself upon him with a sort of life-and-death grip, which can be loosened only by a painful struggle. In over-sensitive minds this quasi-intellectual conflict becomes exquisite torture. Sometimes it ends with square revolt against the instructions of one's youth, and then comes restored equilibrium, though at the expense of belief. Sometimes the early ties prove the stronger; the youth takes the side of his younger self, and again there is equilibrium, but at the expense of intellectual progress.

Another form of the morbid conscience is brooding over the principles of conduct, and especially over the problems of one's life work. Here is a young man who cannot sleep for thinking that possibly it is wrong for him to have a warm bed as long as anybody else lacks one. And here is a crowd of youths who worry and weep over the problem of what they are good for, and whether they ought not to become ministers or missionaries. Concerning these cases, which are frequent, two general remarks will be illuminating. In the first place, many of these struggles are less a fight between a defined selfish motive and a defined unselfish one than a mere floundering about through the confusion of self-distrust. I have known young men to hesitate to follow their common sense because they feared lest selfish motives had corrupted their reason. In such cases the defect is not a tendency to selfishness at all, but rather an over-refinement or double distillation of unselfishness—and unselfing that amounts to paralysis of judgment and action. In the second place, there is often a tendency to decide upon the missionary work or some heroic occupation simply and solely through a confusion of the form with the content of duty. Youth, as I have said, is a period when the absoluteness of the moral imperative strongly overawes the mind. Self-sacrifice now becomes beautiful, and a longing arises to annihilate one's self for some glorious cause. If, now,

there already exists a firm notion that the ministry or mission work or any other occupation is a peculiarly unselfish one, the over-sensitive conscience at once interprets itself as a call to that work. Thus, through mere association of ideas, a particular occupation has become identified with the form or imperativeness of duty in general. I ought to live an unselfish life; therefore I will be a minister.

1. Healthy, moral and religious life during adolescence demands the avoidance of fatigue and all other nerve waste. Too much study, too much indoor life, improper food, too much excitement, irregular habits, private sexual vice, nagging on the part of parents, rasping relations at any point, whatever, in short, needlessly adds to the necessarily heavy tax upon the nervous system, tends to moral and religious abnormality.

2. One of the greatest needs of the adolescent is to feel that somebody understands him. He is a terrible mystery to himself, so strange a being that he dares not even ask questions. In spite of all the devices whereby unaided nature relieves our stresses and strains, the pain of mind secretly endured by sensitive adolescents is enough to constitute a continuous tragedy. The pain would go if only one could talk freely with some sympathetic and mature friend. But generally the mature friend must offer his sympathy without being asked, for it is of the very nature of these abnormal social states of mind that they contain more or less consciousness of their own abnormality, and hence shrink from exposing themselves.

3. The moral instruction adapted to children and to persons of maturity is inadequate for the period of adolescence, and particularly for youths who are over-reflective and over-sensitive. Childhood is the time for rules and for mechanical drill in the habit of obedience. Reflectiveness and the adoption of principles does not come till later. Woe to the child who reaches puberty without having the habit of obedience, for the internal tumult that now arises tends, even under the best of circumstances, to drown the voice of authority. Again, the moral instruction fitted for mature persons takes for granted much that the adolescent in many

cases cannot take for granted. Prudence, for instance, does not strongly appeal to him, nor statistics, nor the conventional adjustments of interests, which he is prone to pronounce compromises with evil. The adolescent is reflective, but narrowly so. In the earlier part of the period he is not yet competent to understand life from the standpoint of a healthy social ethics. Therefore, he must be given reasons which, being true, are yet adapted to his understanding. Mere commands will not do, nor yet too profound philosophy. It is well to surprise him occasionally out of his narrow logic, yet you must not try to beat down his ideas by mere authority, least of all by ridicule.

Another difficulty to be met is the indecision and paralysis of will accompanying self-criticism. What is necessary here is to call the motor apparatus in frequent use, as in athletic exercises and games. Especially advisable are bicycling (preferably on country roads, because of their relatively larger demand for quick decision in steering) tennis, baseball, sailing a boat, skating, fly-casting, cross-tag, "pull away," and "prisoners' goal;" anything in short, which both calls the attention outward instead of inward and requires quick co-ordination and wide muscular areas.

A third difficulty in the moral training of adolescents is their tendency to social timidity—their inability "to take themselves for granted." This shows itself not only in the effort to keep out of sight, but likewise in the clannishness of youth (which is a device for keeping one another in countenance), and in the boisterousness and apparent boldness, which is little more than a way of whistling to keep up one's courage. What such youths need is unconstrained social intercourse with more mature persons on a purely human plane. They need to be taken for granted, as they cannot take themselves, and thus insensibly charmed out of their self-consciousness. I fear that among the socially destitute among us we ought to reckon a good proportion of the entire stream of youth ranging in age from about thirteen to about seventeen or eighteen. Perhaps you are not attracted by these awkward, shy, spasmodic creatures, but they need you. They are neophytes, entering tremblingly upon their

initiation into manhood and womanhood, and they will bless you if you will only be their friend. They do not ask your pity, but they want to get acquainted with you, so as to find out how grown persons really ought to feel and think and act.

4. There is a lesson here for religious teachers also. It is that religious instruction and practice should refrain from increasing this morbid tendency. What is wanted is not so much stimulation as guidance; not so much the awakening of feeling as the evoking of right motor discharges. If you tell a young person to examine his heart frequently; paint before him the rigors of the moral law without equal emphasis upon the content of the moral ideal; appeal to his fears; describe his duties and privileges as though there were no difference in capacity between him and a mature person; tell him that doubt is sin, and represent life as a continuous fight with snakes in the grass—if you do this you may make the victim religious, but you will also make him deformed. What religion ought to do for youths is not to increase their already over-driven subjectivity, but to provide an outlet for it that shall restore equilibrium. There is no occasion for a smile when youths talk of their trials, burdens, anxieties, and the dark side of life. These are serious facts. And religion performs a beautiful office when it takes the load off from one of these timid souls by teaching it how to trust. It performs still another deed of mercy when it calls out motor activities—whether in worship or in the service of man—that give expression to the yearning for the infinite. In a word, religion should help and not hinder the self-expression which many a youth searches for with groanings that cannot be uttered.

The marring influence of certain factors is not completely recognized in Coe's very careful analysis since it is based too exclusively on psychologic lines and ignores Spurgeon's axiom that spirituality by a strange yet natural law is placed close to sensuality; sexuality and religion vicarate in all their phases. The doubt whether the unpardonable sin has been committed is frequent in auto-erotists and particularly in girls brought up with conventional pruriently

prudish ideas of the sexual relation. It is quite frequently associated with autointoxication as the Scotch parson recognized who administered cathartics before giving spiritual consolation. Like Richard Baxter he recognized that black bile was the bed on which the devil worketh and it is possible by physic to cast him out. Pascal who to the end of his life, had, as I pointed out nearly a quarter of a century ago,* an hallucinatory obsession of a blazing gulf by his side which disappeared when a chair was placed over it. The latest biographer of Pascal, Viscount St. Cyres, ignoring the eroto-religious relation and to a great extent the physical results remarks:

"His changing moods and beliefs, his conversion, reversion to rationalism, his transient worldly experience, his second and more imposing conversion, his tremendous mathematical insight, his persistence in investigating all manner of phenomena, his experiments with atmosphere, his opposition to the idea of a vacuum, his astute differentiation between logic and feeling, all point to his immeasurable desire to reach truth.

"There are born into this world certain men who are destined to be questioners. They follow all possible clues in their effort to find out the meaning of things. Pascal, while little more than an infant, struck his glass with a spoon and was delighted to hear it ring. His fingers touched the glass and the ringing ceased. Why? he demanded. Nor was he satisfied till he had determined why. Blocks of any size or shape could be measured, he determined, and he amused himself by estimating the dimensions or their proportions. Atmosphere had weight, he decided. He at once wished to know if it weighed more in one place than in another. He desired above all to learn if there existed any place where there was nothing—if nature tolerated a vacuum.

"When something within him turned him from these great material questions to a scrutiny of his own soul he began to ask questions no less penetrating concerning God, man and his salvation, responsibility, will, grace and sancti-

**Alienist and Neurologist*, 1887.

fication. He and his confreres plunged the thinking and religious world in controversies which have not even yet ceased to interest theologians.

"Pascal went to morbid lengths in his renunciation of self, but his refusal to incorporate any form of joy, save spiritual joy, in his city of life was not alone the result of what may be termed emotional reasoning. It was partly the outcome of a neurasthenia which pursued him from boyhood, and which, while it accounted for his sensitiveness to the higher laws of nature, made him, in the end, the rejector of nature's provisions. Suffering much, he devised the idea of the utility of pain. Obstacles, assaults, slings, and arrows of outrageous fortune "were the birth pangs of conversion, heralding the death of the Me and the dawn of a new, higher life."

" 'Men (according to Pascal) only doubted and stumbled, and despaired, because they had lost their footing on things visible but vain, and had not yet found sure footing among things invisible but real.' And he refers to the convictions of converts. 'They felt they had come out of the prison of self; they were no longer members, isolated units; they were part of the larger whole. And that whole was a universal realm of the spirit, present within them, yet stretching beyond them, changeless and eternal. For it was the land of truth; and she is older than any opinion and by no means began to be when she began to be known.'"

The conversion phenomena as shown in camp meeting ecstasies and the researches of Starbuck have a marked, erotic element and are connected very frequently with the emotional exaltation which is one of the expressions of sex coming at age in puberty and adolescence.

It evinces itself in other directions as well. The art craze, remarks a woman correspondent of Havelock Ellis,* is one modern phase of woman's sexual life. The great centers of Italy were simply overrun with girls studying art, most of whom had little talent, but who had mistaken restlessness from the first awakening of the sex impulse for genius. It

*Psychology of Sex III.

must have been terribly hard for girls who had burned their boats and chosen art as a career, to have added to the repression of their natural desires the bitterness of knowing that in their chosen walk of life they were failures. The constant drudgery combined with disappointment and finding that art alone does not satisfy is so paralyzing. Besides, sex satisfaction is followed by exaltation of the mental faculties, with no depressing reaction such as follows pleasure excited by mental causes alone. The restless play of the sexual impulse here portrayed crowds universities with women, finding distorted expression in a prurient prudery, which interferes with proper scholarship in co-education.

This restless, unrecognized play of the sexual impulse (present, in callow male and female newspaper sensation-alists) seemingly looms up in three women during the last two decades. In two, other factors were present, though all three cases bear a superficial resemblance. Intellectually, Marie Baskirtsheff looms above Mary McLane as infinitely as the latter above Viola Larsen (who leaped into notoriety by imitating her). They cannot be placed in quite the same category. Viola (who stole a physician's horse and buggy to secure the titillation of being a thief) found the chase "delicious, beautiful, wonderful. The blood tingled in the veins," and she was "wild, intoxicated with pleasure." Play, as Froebel points out, is the normal child's work. Viola, hence, scorns, with the precocity of the defective, the "foolish games of other children." When nine years old, she "burned for fame and wrote." The theft was an expression of the kleptomaniac algophily of Lacassagne. The police and the physician whose buggy was stolen took this view. Later, she wrote mixoscopic letters to a school-mate, whom she called up by telephone to find how the latter felt when she received the letters. The school mate, from offended modesty, naturally declined to respond, thereby disappointing Viola of the expected thrill. The letters were apparently due to suggestion from the newspaper éclat given a recent Chicago epidemic of mixoscopic pseudonymous and anonymous letters. Viola was a "genius" entitled to "genius" irresponsibility, popularly allowed

to "genius" eccentricities. Judge Tuthill, who had read her writings, told her to go home, get her absurdities out of her head, and mind her parents. "She was a very foolish girl, who had neither ability nor education sufficient to write." Her love notions exhibit the prying frenzy which makes the adolescent mental horizon one vast interrogation point as to trivialities. She fancied herself in love, but it was "the glitter of brass, not the shine of gold." The mother (a rather stolid, albeit, hysteric Scandinavian), while much puzzled by her daughter (as a hen with a duckling she has hatched), is rather proud than otherwise of her daughter's antics.

The many factors entering into adolescence already pointed out play a part in the psychic uncertainty which underlies the morbid conscience and its egotistic elements. Behind this unstable egotism is the unrest from the entrance of sex into the organism. A new physiologic factor disturbing the balance hitherto existing and hence creating pathologic, albeit not necessarily nosologic, states. The emotional exaltation from this creates a restlessness which often seems to the subject an expression of vigor, but which is allied to and creates the neurotic desire for a new sensation.*

The foundation of this mental state, Havelock Ellis remarks, is an exaggeration of the joy of being plunged among the waves of that great primitive ocean of emotion which underlies the variegated world of everyday life, and pain (a pain often deprived, as far as possible, of cruelty, though sometimes by very thin and feeble devices) which is merely the channel by which that ocean is reached. This emotional intoxication exerts irresistible fascination on paranoiacs and hysterics. Nietzsche regarded this kind of intoxication as of great significance in life and art, because it gives consciousness of energy and satisfaction of craving for power. Desire for "love," exhibited by Viola Larsen, has, through this theft and its consequences, found, by the psychologic process described, temporary satisfaction.

(TO BE CONTINUED.)

*Havelock Ellis, *Psychology of Sex*, Vol. III.

OF LETTERS TO THE INSANE.*

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IN ordinary social or business correspondence the proprieties suggest to not wound the feelings or otherwise hurtfully disturb the mind or harm the interests of the recipient of our letters.

This is doubly essential in writing to the insane. To them our notes and letters should be only balm to their hurt minds, obviously antidotal or not written at all.

Nothing suggestive of the reigning delusion or contributory to the overmastering depression or other emotion, or from a suggestive awakening source, should be written or said.

Hence letters from the family or the home whence the insanity originated or from persons around whom delusions cling or locate are psychotherapeutically objectionable and contra indicated, as we are accustomed to say of things wrongly impressing patients with other diseases.

The attempt of solicitous friends to argue patients out of their delusions or being objects of their hallucinations, to place themselves right by apologies, asking forgiveness, etc., are generally misdirected and form a true psychiatric wrong thereby and malpractice.

Oblivion of the past to which change of environment to the distant hospital, ample sleep and new associates con-

*For the use of much misunderstood and annoyed and too often unjustly censured medical officers who must control and often intercept and return letters and interdict visits to patients, from well meaning friends, ignorant of the possible harm they may do the insane, this communication on a most important matter in psychiatry is here published.—AUTHOR.

tribute much and in the direction of recovery, is what the patient needs.

Friends and family of patients are apt to fear the patients will think themselves neglected if not written to, but often the new thought awakened by neglect of writing to them, if delusions are not kept alive by news from home, where the delusions may have originated and around which they center, will contribute the substitutive awakening of rational feeling and emotions connected with memories of home and friends of other times, before insanity fell upon the patient.

Newly appointed medical officers of hospital for the insane are often at a loss to determine this phase of the correspondence question and the questions of allowing patients to write home. The best rule is generally to discourage both, so long as delusions are expressed in letters by the patient or fostered by those of friends.

Thus much as the rule. But there are apparent exceptions to all rules and the rule must embrace the exception—*exceptio probat regulum*—said the philosophers.

The exception is included in the rule, for where no morbid delusional antipathy exists toward certain home people, especially toward such as have been accustomed to exert a salutary suggestive influence in the direction of rational mental feeling and thought, the aid of such persons, if they are discreet of counsel and suggestion and will conform precisely to medical supervisory instructions as to letters, conversations or visits, may be evoked to help toward mental restoration. Such curative influence may be found in the judicious family medical adviser, especially should he be somewhat of an alienist himself, mayhap from previous hospital experience with the insane.

The favorite minister, priest or other friend, if judicious enough to take advice from a hospital psychiatrist and discreet of speech or letter or conduct, as admonished from the hospital, and if in no way connected with the patient's delusion or morbid antipathy, aversion or dread, may help in ministering to the mind diseased. But the help must always be under skillful psychiatric instruction. Sleep, diversion

and oblivion to morbid impression or conviction being the best psychic restorers. Our words, our acts, all we do or say or let the patient do or say, or see, or hear, should so far as practical, tend to bring to the disordered, distressed mind "sweet oblivious antidote" to mental disease.

The psychical and the physical here being so intimately inter-related, every influence, mental or material, that may promise return of strength to brain and mind should be brought to bear, in environment and in chemical, physiological, mental and other therapeutic impression, in order that the patient may be brought again into his right mind.

The nurse, the visitor, the correspondent, the doctor, the servant or mechanic on the hall and all who come in contact with the patient and all things said or done, seen or felt may mar or make for recovery. To the sane away from home, the recall of "home sweet home" is suggestive or reminiscent of joy and happiness sometimes beyond compute. There is often no place like it, as the poet has so ardently sung. But to the insane mind, moved by delusion originating or centering there, there may be no place in the morbid imagination so loathsome, so repulsive, so distressing, though that home may have been ever so beautiful and attractive to its indweller or possessor before the mind lost its psychic hold on or left her normal throne in the brain where right reason and emotion formerly dwelt in normal tranquil repose.

The premature return to home so often insisted upon by the same unwise friends or in visiting the insane often results disastrously. In early professional life I yielded in several instances to importunities to return home of my patients, resulting in disaster to them. One gentleman of more than ordinary enterprise and ability in his sane state whose predominant delusion was to refuse food because he "had no stomach" and required three months of forced feeding, residence and treatment in my hospital before he gave up the delusion, was taken home during early convalescence by his wife, who insisted that he was well and "would never become insane again" because "she knew her husband better than I did", relapsed after a brief time at

home and died of an intercurrent disease. This man was a maniac depressive though classified as a melancholic only.

Another, pre-paretic parietic with cerebral hyperaemia, hemorrhoids and exalted delusion was taken home in the same way when the wife saw him transiently free from his delusions under antiseptic mercurial cholagogues and drachm doses of bromide of sodium, speedily relapsed and died delirious and comatose in a Kansas asylum.

Another case, in my early psychiatric experience, whom I thought recovered from his melancholia because he so steadily improved in the asylum, was discharged by me as recovered because he appeared to have become rational after a four months stay with me, killed himself with a pistol shot in his right temple on coming in sight of home. He had got the revolver at a neighbors. He went home on horseback. Instances of relapse of recovering patients caused by untimely visits of the wrong persons happened during my first years superintendency, but such occurrences did not take place during my later years of occupancy because untimely visits of unsuitable persons were peremptorily discountenanced..

A wider knowledge of the insane than exists among the laity at present is essential in other respects than in writing letters to them or talking with them. Besides mistakes concerning them in ordinary hospitals and sanitariums, the police often make grave mistakes to the harm of both, as in the recent Kansas City police error with the violent Kansas City lunatic (Jones) who might have been overcome with a hose or rushed and enveloped in carpet or blanket and overpowered instead of being shot down like a dog; or put in a cell by himself and chloroformed by squirting it through the key hole, if necessary, as the writer once alone overpowered a murderous destructive insane man who was breaking everything, including windows and guards with the leg or short post of his bed. The police would not have put a mad dog in with a lot of other prisoners. Why put a mad man among them? Prisoners have some rights which even the police should be bound to respect.

We must live with the insane, as the great alienist Es-

quirol said, in order to understand them and when we are called upon for the first time to live with and care for and treat them we must cautiously and diligently consider everything that may contribute to mar or mend the mind deranged. This is true clinical psychiatry.

Many casualties occur in ordinary hospitals and sanitariums not governed by a medical head familiar with psychiatry, neglecting the right guardianship of the delirious and insane. Precautions that come promptly to mind in the brain of the clinically experienced alienist are never thought of, concerning mentally impaired cases not maniacal or suicidal, who in transient fits of delirium throw themselves out of windows, strangle or otherwise destroy themselves because of neglected surveillance or omitted precautions as to letters, visits, environments, concealed weapons, etc. But this subject while somewhat germane had better be considered at another time.

GLYCOSURIA DUE TO SOME GLANDULAR EXTRACTS.

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BLUM was the first to show that the adrenal when given subcutaneously produced glycosuria. Borchardt¹ has proved that the hypodermic use of the pituitary produced a small amount of sugar in the urine. He used the boiled filtered infusion of the gland, which was injected hypodermically in rabbits and dogs. The quantity of sugar obtained by him varied from a trace to 4.2 per cent. The absolute quantity of sugar was very small, not more than a centigram. The sugar usually began to appear in the urine three hours after the injection. The amount of sugar excreted was extraordinarily variable and to a great degree independent of the amount of the gland injected. He found that pituitary produced glycosuria more easily in rabbits than in dogs.

INFUNDIBULIN.

We have also studied the effect of injections of infundibulin, pancreas and parathyroids in rabbits and cats. The number of our experiments was thirty-five. The tests for glucose were Fehling's fermentation and the phenyl hydrazine tests. The injection of these extracts of the glands proceeds on the theory that they act like a hypersecretion of the gland. The first extract used was infundibulin. Twenty per cent extract of the pituitary (Burroughs Wellcome & Co.) Borchardt used the whole gland to produce sugar. Falta was unable to obtain in rabbits any glycosuria with pituitrin, which is obtained from the infundibular part of the pituitary.

1. Zeitschrift für Klinische Medizin, 1908, Band 66, page 332.
(192)

We have made several experiments with infundibulin, of which we injected 1 c. c. into the muscles of the rabbit, as Meltzer has shown that adrenalin is more rapidly absorbed here than under the skin. In all cases at the end of two and a half hours we found glucose in the urine, the amount being about one-eighth of one per cent.

In cats intra-muscular and intra-peritoneal injection of the infundibulin produced similar results. In akromegaly Hinsdale found in an analysis of 130 cases that 10.8 per cent. had sugar. Borchardt from an analysis of 176 cases of akromegalia holds that glycosuria is more regularly associated with this disease than with any other. However, there are cases of tumor of the hypophysis without akromegaly and which are not complicated with diabetes. Kollaritz has collected 51 cases of this nature. From our experiments we must infer that the glycosuria is due to a hypersecretion of the infundibular part of the hypophysis, perhaps of the *pars intermedia*.

DRIED PANCREAS.

Pariset² injected pancreatic juice into the portal vein of dogs, using 20 c. c. of the juice. He made analyses of the amount of sugar in the portal vein and hepatic vein before and after the injection. He found after the injection of the pancreatic juice that sometimes the amount of sugar in the hepatic vein was doubled. Pariset³ proved that it was not due to the alkalinity of the pancreatic juice. He also boiled the juice and injected it into the portal vein; then analysis of the blood in the hepatic vein showed that the increase of glucose was very small. He also injected into the portal vein a very active diastase, the vegetable amylase of the extract of malt. Then he obtained a considerable increased amount of sugar in the hepatic vein. From these data Pariset infers that the hydrolysis of the glycogen in the liver by the pancreatic juice is due to an amylolytic ferment which it contains.

2. Comptes Rendus de la Société de Biologie, 1904, page 720.

3. C. R. de la Société de Biologie, 1905, page 268.

Pariset⁴ injected secretin into the portal vein; it increased the biliary secretion, but did not augment the glucose in the blood.

We tried not the juice but the dried powdered pancreas subcutaneously. It was rubbed up with distilled water and used upon rabbits and cats. In a few hours the urine was withdrawn and one-eighth of one per cent of sugar was found to be present. The amount of pancreas injected was about 15 grains.

The question now arises, was it due to the ferment amylopsin or to choline? When we boiled the pancreatic infusion and then injected it we obtained no sugar in the rabbit. These experiments would lend support to the theory of Pariset that it is amylopsin in the pancreas which produces the sugar after injection of powdered pancreas. It might be choline.

Gautrelet⁵ found by the reaction of Florence (the reagent of Florence is made of two parts of iodine, six parts of iodide of potassium and 100 parts of water) the presence of choline in the pancreas, thyroid, kidney, ovary and liver. But it was especially in the pancreas and kidney that crystals of iodo-choline were the largest and most abundant. When Gautrelet removed the choline from the pancreatic extract as a chloro-platinate and injected the extract then adrenalin injected into the rabbit produced sugar. When the pancreatic extract did have choline in it, then the pancreatic extract injected prevented the glycosuria by adrenalin. Gautrelet⁶ found when a rabbit had a half a milligram of adrenalin subcutaneously that it caused sugar to appear in the urine at the end of two hours. If he mixed 0.20 gram of choline with the half milligram of adrenalin and then injected both subcutaneously then no sugar was found in the urine at the end of 3½ to 7 hours. Blanchetrière and Chevalier⁷ have shown that the presence of fatty acid is a cause of error in the reaction of Florence used by Gautrelet. They

4. C. R. Société de Biologie, 1906, page 66.

5. C. R. Société de Biologie, 1908, page 174.

6. C. R. Société de Biologie, 1908, page 173.

7. C. R. Société de Biologie, 1909, page 249.

found no choline in the pancreas and only traces of it in thyroid.

Gliken⁸ states that neurin, betain, muscarin and the purin bases give the same reaction to the reagent of Florence as choline does. Parisot⁹ also concludes that choline is not the principal cause of the fall of tension in the blood vessels by injection of the glandular extracts into the vein.

W. Webster¹⁰ has shown that it may even be doubted whether any of the micro-chemical tests at present in use are specific for choline. The choline theory from nerve degeneration is not seriously considered by several chemists. Frank and Isaac¹¹ have made various kinds of experiments with choline both in dogs and rabbits. They found it had no influence on the hyper-glycaemia and the glycosuria of adrenalin.

We tried the subcutaneous use of one-eighth of a grain of choline in rabbit, but it produced no sugar in the urine.

Hence, as the presence of choline in the pancreas is doubtful, and as Gautrelet has shown, choline prevents adrenalin glycosuria, or according to Frank and Isaac had no influence on the glycosuria of adrenalin, and our experiments show it does not produce glycosuria, we must infer that dried pancreas does not produce glycosuria by any possible choline in it. As to the actual body which does produce it, we are unable to state what it is.

PARATHYROIDS.

We found that 10 to 15 grains of powdered parathyroid rubbed up with distilled water and subcutaneously injected into rabbits produced in $2\frac{1}{2}$ hours glycosuria. When it was injected intraperitoneally in cats the same result ensued. The percentage of sugar obtained in the rabbit was about one-eighth of one per cent.

SEAT OF THE GLYCOSURIA.

(1) *Removal of Thyroid.* In etherized cats we extirpated the thyroid, leaving two or more parathyroids. On

8. Oppenheim, *Biochemie*, part I, page 154.

9. C. R. *Société de Biologie*, 1909, page 753.

10. *Bio-Chemical Journal*, 1909, page 117.

11. *Wiener Klinische Wochenschrift*, 1909, No. 27, page 983.

the following day we found sugar in the urine in a few cases. A similar result after the removal of the thyroid has been found in dogs by Falkenberg and Rahel Hirsch.¹² Falta, however, did not obtain it in dogs. We found, however, that the injections per jugular of the same dose of infundibulin, or of pancreas or of parathyroid in the cat after the absence of the thyroid was followed by a decrease in the amount of sugar as compared with those animals whose thyroid was intact. Before the removal of the thyroid these agents caused 3 to 4 per cent. of sugar in the urine; after the removal, 1 to 2 per cent. The pancreas and parathyroid in the jugular injections were rubbed up with distilled water and filtered through cotton. We took care that the binding down and etherization did not produce glycosuria:

(2) *Removal of Adrenals.* In the etherized cat we removed the adrenals with the most careful antiseptic precautions. As they usually died on the following day, we injected immediately on the same day the infundibulin, pancreas and parathyroid. They were given by the jugular. The pancreas and parathyroid were rubbed up with distilled water and filtered through cotton. In all cases sugar appeared in the urine. However Nishi has shown that removal of adrenals is followed by hyperglycaemia.

(3) *Splanchnicotomy.* In cutting both splanchnics in the cat we followed the procedure of Schultze.¹³ The animals were etherized and the strictest antiseptic precautions followed. The abdomen was closed by suture and the animal placed in the cage until the next day. Then they were again etherized, jugular prepared and infundibulin and the watery infusion of the pancreas and parathyroid injected. But at no time afterward did we observe any sugar in the urine. Pollak¹⁴ in a classification of the glycosurias found that adrenalin produces sugar in the urine after splanchnicotomy being an agent which stimulates the terminals of a sympathetic nerve. The glycosuria of caffein does not ensue

12. Zeitschrift für Klinische Medizin, 1908, page 6.

13. Archiv. für Experimentelle Pathologie und Pharmakologie, Band 43, 1899

after splanchnicotomy. According to Macleod, curare does not cause any sugar in the urine after section of the splanchnics.

As section of the splanchnics arrests glycosuria, we must consider it due to an action on the diabetic center in the medulla acting through the splanchnics on the glycogen of the liver. If the sympathetics influence the adrenals who then activate the glycogen in the liver or if they act directly on the liver is a question not decided by these experiments.

14. *Archiv. f. ex. Pth. u. Pharmakol*, 1909, *Bund* 61, p. 376.

THE APPEARANCE OF PELLAGRA IN THE UNITED STATES.*

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IT is quite probable that pellagra existed for many years in Europe before its recognition as a distinct disease. It was long considered an unusual manifestation of some other disease, as scurvy or leprosy. The first indication of the disease in literature was made by Ramazzini, who called it *mal del padrone*. In 1730 Gaspard Casal, a physician of the Asturias, described pellagra under the name *lepra asturiensis*. This name is accounted for by the fact that leprosy was at that time prevalent in the Asturias, and Casal considered pellagra a manifestation of leprosy. Another author accredits the name *lepra scorbutica* to Casal. Soon after this it was noted in Galatia, and somewhat later in Castile, Rome, and Aragon. Among the people it was variously designated as *mal de la rose*, *mal del sole*, or *mal de la misera*. About 1750 the Northern provinces of Italy, chiefly in the neighborhood of the Lago Maggiore, became the chief seat of the disease, and seemed to furnish a much more favorable field for its extension, and while the disease was still present in the lower Spanish provinces, it has never made as much headway there as in Italy.

Frapalli was the first to apply the name pellagra (Ital. *pelle* and *agra*, rough skin). This was about 1771. Frapalli claimed that the disease pellarella, which had been known

*This interesting paper, both historical and clinical, was read by invitation before the college of Physicians and Surgeons, Philadelphia.

for many years, was identical with pellagra, and that it was present before the introduction of Indian corn from America. Contemporaneously with Frapalli the disease was described by Odoardi in Venetia, and called by him *scorbutus alpinus*. Somewhat later, Puyati did important work in showing that all these descriptions and names were for one and the same disease—pellagra.

By 1784 the disease had reached such proportions and the people had become so aroused that the Joseph II Pellagra Asylum was established in Legnano under royal authority and the elder Strombio placed in charge of it. Strombio's work was of the greatest importance, and marked a decided advance in the study of the disease. By the close of the eighteenth century it had extended into Liguria and Piedmont. In 1818 Hameau, the elder, described it under the name *mal de la teste*, occurring in the neighborhood of Teste, and it was at this time that the people bestowed the appropriate name *mal de la misera*. It was also known as *dartres malignes*, *mal de Saint Rose*, *mal de la Saint Mari*, and numerous other names of similar character, after the holy orders to which the sufferers went for relief.

In 1826 Marchand recorded the appearance of pellagra in the southern provinces of France, especially in the rural districts, in the Gironde, in the Pyrenees, and in the Haut-Garonne and the Aude.

In recent years in these latter districts it has been greatly reduced, presumably because the corn culture has largely given place to the cultivation of other grain for which the soil is better suited.

Roumania, which is now a stronghold for pellagra, had no recorded case until 1810. This date is associated with the introduction of Indian corn from Italy in coastwise vessels. In 1836 Varnow described it in his inaugural dissertation, and in 1858 Julius Theodori did likewise. The people knew the disease by the name *Buba Tranjilar*.

In more recent years Bouchard described the disease in Mexico. It has occurred in Brazil, Argentine Republic, Uruguay, and also in Africa. There have been sporadic cases reported from the Tyrol, Servia, Bulgaria, Greece,

Asia Minor, and one case from England. In the 60's, Gray, of New York, and De Wolfe, of Nova Scotia, reported sporadic cases, but the correctness of the diagnosis was questioned.

Pellagra has without doubt existed in this country for many years, but the appearance must necessarily have been sporadic, for no death-dealing pestilence such as the acute pellagra now so prevalent in the Southern States could have long been overlooked.

In 1902 Harris, of Georgia, reported a case simulating pellagra, in which he found abundant hook-worms. From the description the case must have been well-defined pellagra.

In 1883 Sherwell reported a case in New York. The patient was a Genoese sailor. We are indebted to G. H. Searcy, of Alabama, for the first positive report. He recorded an epidemic of 88 cases occurring in the State Hospital for Colored Insane at Mt. Vernon. Of this number, 57 died. In 1907 J. T. Searcy reported 9 cases from the Bryce Hospital, in Alabama. T. C. Merrill, in 1907, reported a sporadic case from Texas. Recently, before the Medical Section of the American Medical Association, R. H. Bellamy reported 10 cases seen by him in Wilmington. Bellamy and J. B. Wright, of Lincolnton, were the first to recognize the disease in North Carolina, and did so before the appearance of Searcy's paper.

Moore has recently reported a case from Augusta, Georgia. Babcock's report to the South Carolina Board of Health aroused much interest in the matter. He described 12 typical cases.

At the 1907 meeting of the American Medical Association I reported a series of cases under the title of "Symmetrical Gangrene of the Skin," not recognizing their identity as pellagra. I suspected that malaria played a part in the causation of the skin lesion.

In Europe at the present time the chief seats of the disease are Northern and Central Italy and Roumania. The disease is endemic between 42° and 46° north latitude, 11° west and 26° east longitude of Paris. Several small foci are not included in this area.

In 1879 the number of cases in Italy was 97,855. About

this time in Venetia, among 10,000 deaths, 500 were due to pellagra. Since 1881 the number has declined materially, due to the strenuous efforts on the part of the government in the more careful inspection of Indian corn and in the improvement of the general hygienic conditions. Next to Venetia stands Lombardy, with 300 deaths, then Emilia, with 200 deaths. Piedmont, Umbria, and Tuscany attribute over 5 per cent. of all deaths to pellagra. Neusser claimed that in Venice, in 1886, with a population of 36,588 natives, there were 1086 cases of pellagra.

In Roumania, in 1885, there were 10,626 cases; in 1886, 19,797 cases out of a population of 5,300,000. In 1892 there were 4500 cases; in 1898, 21,272 cases. Triller says that in 1906, in Roumania, there were 30,000 pellagrins. From 1893 to 1898 Sandwith reported 500 cases at the Kasrel Ainy Hospital in Cairo. In Algiers the disease is well distributed. Triller's idea of the extent of the disease is amazing. He claims that in certain parts of Italy, in 1906, from 30 to 50 per cent. of the population were affected; that in 1899 the number of cases in all Italy reached 73,000, which was more than 10 per 1000 of the rural population. Tuczek claimed that in 1884 there were 10,000 pellagrins in Italian institutions.

Pellagra has extended with great rapidity throughout the South during the past few years. It has been reported from North Carolina, South Carolina, Georgia, Alabama and Texas. I have been able to find reports of 200 cases. Of this number, 88 are from the above-mentioned epidemic reported by Searcy, in Alabama, 25 are at present under the care of J. W. Babcock, at the State Hospital for the Insane in Columbia, South Carolina, 12 were reported by McCampbell from the Western North Carolina Hospital for the Insane, and 3 from the North Carolina State Hospital for the Insane under the care of J. H. McKee. In all, 65 cases have been recognized in North Carolina; of this number 25 have occurred in New Hanover County, with an approximate population of 40,000.

The disease appears essentially in two forms. In one, the chronic, we have the typical picture described by the

Italians: Symmetrical erythema, especially of the exposed portions of the body, which appears usually in the spring associated with stomatitis, diarrhea, often some gastric disturbances, and followed by cord symptoms of various kinds, and finally by mental disturbances of varying degree, and cachexia. As summer advances the symptoms usually disappear, only to reappear with the following spring. With each recurrence the impression on the nervous system becomes more indelible, the cachexia more marked, and the skin more atrophic and discolored. The average duration of these cases in Italy is five years, though not infrequently the duration is twenty years. One of Tuzek's cases was diagnosticated pellagra in 1851, and died of broncho-pneumonia in 1887.

Mrs. W. (Dr. Thomas M. Green's case), aged thirty-four years. Nothing of note in her family or personal histories except malaria. In the spring of 1906 she suffered with indigestion and diarrhœa. One month after the occurrence of these disturbances an erythema appeared on the backs of her hands, around both eyes, and on the back of the neck which much resembled sunburn. During the summer her condition became improved. In the spring of 1907 she suffered a recurrence similar to what she had had in 1906. In May, 1908, her condition was as follows: A poorly nourished, cachectic woman, appearing much older than her real age. Situated on her forehead symmetrically were two areas of desquamating erythema. These areas were symmetrical in position, shape and size. Between the two areas was a vertical strip of normal skin. Lesions of like character surrounded both eyes. On the upper lids the lesions were more recent, and were covered with crusts with a weeping surface beneath. The lesions extended into the anterior nares. The lesions were present below the eyes, and there was present brownish pigmentation, indicating their greater age. On the backs of both hands, extending from the finger nails to the middle of the forearm, there existed the moist lesions, which were covered with crusts. Over the knuckles and the tip of the styloid the condition was exaggerated, the surface being entirely raw. The lesion

was present on the anterior surface and the palms, and like the posterior, except that the skin of the palms was simply erythematous with exfoliation. Near the margins of the arm lesions there was considerable brownish pigmentation. On the back of the neck was a much older lesion, which had caused a tawny discoloration. Posteriorly, this lesion was about two inches in width, but became narrowed as it extended anteriorly. From the two sides the lesion lacked two inches of meeting in front, forming a sort of collar. The labia were affected with a moist lesion. She had had an obstinate diarrhea and stomatitis. Physical examination was negative. The urine contained a small amount of albumin and granular casts. The blood showed a simple anemia of moderate degree and no leukocytosis. The differential leukocyte count showed no abnormal variations.

When first seen this patient presented the picture of profound melancholia. As her condition became worse her mental state changed to one of wildest mania, making it necessary to forcibly restrain her to prevent her leaving the bed. She never spoke, but made incoherent cries, and presented the spectacle of great fear. She refused nourishment when it was offered, but would take it if it were left at her side. Her whole body was in a condition of tonic spasm. In her mania the crusts had been rubbed off of the diseased areas, and the bleeding surfaces made a loathsome patient. She died about three weeks after her admission to the hospital. The autopsy showed general fatty changes in the liver, with slight increase in connective tissue around the blood-vessels. There was also a slight round-cell infiltration. The capsule was thickened. The kidneys showed moderately advanced interstitial changes. The spleen and adrenals were negative. The changes in the cord were inconsiderable and indefinite save for obliteration of the central canal. The case was not sufficiently chronic to have produced very characteristic nervous changes.

X. (Dr. J. B. Wright, Lincolnton, N. C.), female, white, aged eleven years. This patient belonged to the better class. The course of the disease was typical, except that she had

four attacks in six years, dying in the fourth, when seventeen years of age. The four attacks began each time in March.

The erythematous recurrences of pellagra usually occur yearly, and almost invariably in the spring. One of my earlier cases presented an interesting deviation from this rule.

A. R., white, married, aged forty-six years, a grocer. His family and previous history were both negative. He was a magnificent specimen of a vigorous, robust man. The condition was ushered in with high fever without prodrome. This fever was probably an attack of malaria. It was followed by a profuse sweat and apparent recovery. One week later his strange actions attracted his wife's attention. He would ring his own door bell and appeared dazed, making many absurd mistakes in his business. This was followed by a general apathy. He suffered from no delusions or hallucinations, and there were no sudden outbursts. After six months there appeared in June, 1905, two spots of erythema on the backs of his hands. He suffered at this time from diarrhea and had no control over his bowel or bladder. He would lie quietly in bed. His speech was low and hesitating and his gait unsteady. His habits were most untidy. The erythematous areas, which were of the dry variety, cleared up, and after desquamation the skin was soft and smooth. His mental condition, however, did not improve. In October, 1905, he was admitted to the James Walker Memorial Hospital, in Wilmington, N. C. At this time the erythema had reappeared and extended from the ends of his fingers posteriorly to two inches above the wrist joint. The lines of demarcation on the two hands were symmetrical in the most minute detail. There was also a lesion on the external surface of the right leg. This lesion involved the lower third of the lower leg and the external surface of the foot. It had caused considerable destruction of the skin. There was a corresponding lesion of smaller size and of the dry variety on the left leg. This patient's blood presented a remarkable condition. For three weeks the blood was loaded with tertian malarial parasites, and his chart, which was carefully kept, showed no rise of temperature. At the end of this time the temperature suddenly rose to 105° and

the blood showed the preponderance of quartan parasites. From that time his temperature chart showed remarkable variations, and the blood showed the preponderance of first one variety of parasites and then another. In the spring of 1906 this patient had his third attack, and died in an epileptiform seizure.

From the beginning a case may be classified as acute or chronic without difficulty. The following is a typical case:

D. J., female, colored, aged twenty-one years, a field hand. She was troubled in February, 1908, with a bloody diarrhea, indigestion, globus hystericus, and leucorrhea. After three months the erythema appeared in the "snuff box" of the right hand. This spot desquamated before the corresponding lesion of the left hand appeared. In June, 1908, she was admitted to the James Walker Memorial Hospital. On the backs of both hands, from the finger tips upward, was found a dry exfoliating lesion of the skin, which was darker than the normal. The upper margins of the two lesions made oblique lines extending from a point at the middle of the forearm internally downward and outward to within one inch of the wrist joint. The same line was carried out anteriorly, and the lesion in this respect was unusual. There were small, round, symmetrical areas on the upper lids near the inner canthi, and at the outer canthi smaller areas. Small areas were found at the angles of the mouth. On the tops of the feet over the ankle joint and also on the tops of the toes were present similar lesions. The patient had never gone without shoes. There was no history of stomatitis. In July the lesions subsided and the patient was discharged. This was her first attack.

It remains to be seen what will be the course of some of our chronic cases which have survived the first attack, or even the second, and are entitled to be counted chronic cases.

The acute or fulminating variety of pellagra, called by Lombroso "typhoid," differs widely from the Italian form. It runs a course usually of from three weeks to three months, and invariably ends fatally. The patients usually die before any marked nervous changes appear other than those usually incident to a profound acute toxemia. Over 50 per cent.

of the cases in the Southern States are of this variety. Belmondo and a number of other Italian observers claim that this form is never primary; that it is always an exaggeration of a regular recurrence of the chronic form of the disease.

B. B. (Dr. R. H. Bellamy, Wilmington, N. C.), aged thirty years, white, married. When first seen the disease had existed for several weeks. The patient was much emaciated, and was suffering from an obstinate diarrhea and stomatitis, which suggested ptyalism. On the backs of the hands and the posterior surface of the forearms there were found moist exfoliative skin lesions. The same lesion was present on the back of the neck. In the beginning the patient thought he had simple sunburn. In all situations the chief characteristic is absolute symmetry. After a few weeks this patient died of exhaustion.

V. S. (Dr. W. J. H. Bellamy, Wilmington, N. C.), negro, female, aged twelve years. In February there appeared at the outer canthi of the eyes two small red symmetrical areas. These areas extended over the forehead. It next appeared beneath the angles of the jaws, and from there around the neck, meeting behind. Soon after the appearance of the skin lesions there developed a severe stomatitis. The next step in the disease was the appearance of the erythema on the backs of the hands, including the fingers. From the beginning there was always an obstinate diarrhea. In May she came under my care. At this time the whole face was covered with the lesion, which appeared like an old burn and had caused much contraction, producing thereby an ectropion of both lower lids and distorted the mouth. She was unable to open her mouth wide enough to permit any examination, and she also was unable to close her eyes completely. Both hands and both lower thirds of the forearms were covered anteriorly and posteriorly with the moist lesion. Conjunctivitis soon developed, and there was marked subconjunctival edema. The feet were edematous, and later (several weeks) the lesion appeared on the dorsal surfaces. The knee jerks were absent. Skin sensation normal. Pupils reacted normally to light and accommodation. The patient complained constantly of cold. Her

appetite at first was good, but later she refused all nourishment. The affected skin was exfoliated, leaving perfectly raw surfaces. The patient passed 80 round worms during the three weeks she was under observation. She died of exhaustion in June.

In Italy the disease is confined to the peasantry almost exclusively. There poverty and pellagra are interchangeable terms. With us the disease is affecting all classes alike. Of the 25 cases which I have studied, in none was there a history of a pre-existing chronic affection as tuberculosis. As a rule, the victims were previously well nourished and robust until affected with pellagra.

We have had occasion to consider whether the disease is infectious or contagious and also whether it is a family disease. The case just referred to was one of two members of the same family simultaneously affected. The other member was a younger sister, who has the chronic form and recovered from the first attack. I have seen four children of the same parents affected simultaneously. Two of these patients died suddenly in the first attack. The other two have passed from our observation.

A prodrome is acknowledged by all pellagralogers. This prodrome usually begins about Christmas time, and is characterized by indefinite symptoms, as anorexia, or voracious appetite, pain and sensation of distention in the epigastric region, frequently diarrhea, though oftentimes constipation, insatiable thirst, or the reverse. Later there appeared headache, which is chiefly occipital, pain in the back and the neck, hyperesthesias, dizziness, muscular weakness, and uncertainty of motion. Roussel considered sensations of dryness and burning in the mouth and heat in the stomach as the first symptom of the disease. In most respects these symptoms present nothing peculiar, but we have learned that when our patient complains of headache, vertigo, sensations of weakness, especially in the lower extremities, together with diarrhea, to become suspicious of pellagra, especially if the season be late winter or spring. Theodori claimed that these pre-pellagrous symptoms existed four weeks be-

fore the appearance of the erythema, but in many cases the period is much prolonged.

The erythema almost invariably makes its appearance in the spring. In one series it appeared as early as February and as late as July. The greatest number developed in April and May. The uncovered portions of the body, as the hands, face and neck, are more apt to be affected, and in all cases are first affected. Authorities have always differed in regard to the role played by insolation in the causation of the disease. From our experience we are disposed to reject the idea. The disease usually appears so early in the spring that the sun's rays are of little consequence. Those of our cases with the lesions of the skin of the feet were in most cases adults who were not in the habit of going without shoes. Further, the skin over the sternum is often affected. Some writers think that the actinic rays are responsible for these lesions of the exposed parts of the body.

The backs of the hands are invariably the first situation of the lesions. This occurred in all of our cases. The lesion in this position is very distinctive, and usually furnishes sufficient evidence for a positive diagnosis. The first appearance is often mistaken for sunburn; no two things could be more alike. The lines of demarcation between the normal and diseased skin are absolutely symmetrical in position and direction. The points of greatest intensity are usually the skin over the knuckles and tip of the styloid processes. The lesions usually begin at the finger nails and extend upward to the junction of the middle and lower thirds of the forearm. The general appearance is usually that of diffuse redness without swelling, but in some cases the swelling is added and makes its appearance before the erythema. The condition terminates in dry exfoliation, or there may appear blebs which rupture, leaving raw surfaces which soon become covered by crusts. The appearance of the skin after healing is variable. It may be soft and velvety like an infant's skin, but there is always a tendency to the deposition of pigment, which increases with each recurrence. In three of our cases the lesion extended to the palmar surfaces, and in this position we always noted

the soft, smooth condition of the skin after the lesions disappeared.

After the hands the face is most apt to be affected, and we found this much oftener in women and children than in men. Perfect symmetry is maintained here just as in the hand lesions. Often the first appearance on the face are two small spots at the outer canthi of the eyes or the angles of the mouth. In several cases there were two spots of erythema on the forehead, with a narrow strip of normal skin exactly in the midline separating them. Sometimes the lesions assume the butterfly shape of lupus. Small areas below the lower lids are frequent. We have seen the lesions on the back of the neck with a maintenance of the same symmetry, and oftentimes there is lateral extension of these lesions which may form a collar meeting in front. The next point of selection is the tops of the feet. It occurred in one-third of our cases. In an acute case the erythema had much the appearance of an acute lymphangitis, beginning over the crest of the tibia and extending downward over the tops of the feet to the toes. As before mentioned, the erythema may appear over the sternum. The labia pudendi is a frequent seat of the lesion, even in children. With healing there often is associated contraction of the skin, as in superficial burns. In photograph No. 1 marked contraction of the skin of the face is shown with resulting ectropion and contractions of the skin of the upper and lower lid, which made complete closure of the lips impossible. In the dry lesions exfoliation usually occurs after three or four weeks. The resulting pigmentation varies from a slight yellowish tinge to a brown or chocolate coloration, depending on the number of the attacks.

The stomatitis appears usually after the appearance of the skin lesion, sometimes long before, and again may be entirely absent. It is a very characteristic symptom, and seldom fails to appear at some stage of the disease. It often suggests pyalism. The gums are usually swollen and intensely red. The tongue is red and often denuded of epithelium, giving the characteristic "bald tongue." The papillæ are enlarged, with furrows between. The patient com-

plains of the sensation of a salt taste and burning in the mouth. Salivation is very frequent. In all of our cases the mouth was affected in some degree.

The stomach is variously affected. In some cases the hydrochloric acid is normal in amount, while in others it is absent. Pyrrhosis, eructations, vomiting, anorexia, or bulimia, together with great thirst, have been emphasized by various writers.

One of the most unfailing symptoms is an obstinate diarrhea which is most intractable. Sometimes it assumes a dysenteric character with violent colic. This intestinal condition is considered by many as a neurosis.

In the acute form of the disease the nervous disturbances are no more than ordinarily occur in any profound toxemia. It is difficult to say at what stage the nervous disturbances appear in the chronic variety. In one of the cases previously referred to a robust man developed mental disturbances of a peculiar sort, and had been in an institution for the insane a number of months before the first appearance of the pellagrous erythema. I recently discovered the first attack of pellagrous erythema in a woman who for several years had been in a hospital for the insane with a diagnosis of melancholia. Can it be that apart from pellagrous insanity the insane are predisposed to the disease?

The first nervous symptoms manifested are usually paresthesias. Chief among those are usually mentioned itching of the backs of the hands and the back, occasionally also, of the lower extremities. The patients under my care often complain of pain of a burning character in the right or left scapular region. This latter is a very common symptom often referred to. This burning sensation often occurs in the epigastrium, the hands and the arms, and is supposed to be the cause of the tendency among pellagrins to throw themselves into the water whenever occasion presents itself. Numbness and formication are often complained of. One of the most constant complaints is cold extremities and it is no unusual sight to find our patients in midsummer huddled before a fire trying to keep warm.

The vertigo of pellagra is a symptom much emphasized by the Italian observers and was seldom wanting in our cases. It is responsible for many falls. By some it is considered merely a simple lapse of consciousness. According to the careful observations of McCampbell, of the Western North Carolina Hospital for the Insane, the psychic manifestations were preceded by a period of anxiety and worry, with the attachment of undue importance to trivial things. There is often a simple slowness of ideas. A question is replied to long after the patient seems to have forgotten it. There often occurs an irritable depression, with aversion to any activity. Later, there develops disturbances of perception with development of hallucinations. Judgment may be disturbed, giving rise to delusions which usually are painful and depressive. These delusions are usually more of fear and suspicion. Our hospital cases were a great care because of their persistence in disarranging the bedclothes, attempting to get out of bed, and especially in their total disregard of all cleanliness. We were disposed to consider at first this latter as viciousness, but soon learned that it was mental hebetude. Refusal of food and suicidal tendencies were frequent in our series. As the disease approaches its close the patients become wildly delirious, and it is usually necessary to resort to the restraining sheet. They frequently cry out in a wild incoherent fashion, and in their ravings it is impossible to prevent damage to the skin lesions, with the result that large areas are left raw and bleeding. The patient in such cases presents a horrid sight.

A condition is often observed somewhat resembling tetany, with paroxysmal tonic contractions and contractions of the upper and lower extremities in the semiflexed position. The gait is simple paralytic, occasionally paralytic spastic, but never ataxic. There is something characteristic, however, in the unsteadiness and seeming lack of confidence with which these people shuffle along. Static ataxia is occasionally mentioned. Inco-ordination is seldom observed and then only in the upper extremities. Tremor of the arms, head and tongue sometimes occurs.

Definite epileptiform attacks with loss of consciousness are occasionally observed, having the character of a cortical epilepsy. One of our patients died in such an attack.

The skin sensibility is very irregular. The sense of taste is usually normal. The farado-cutaneous sensibility is often increased. Sometimes there is decrease of tactile and thermal sense. Owing to the altered condition of the patient's intellect and the resulting unreliable character of the replies to questions, any investigation of sensation is unsatisfactory.

The skin reflex is usually normal. The pharyngeal reflex is not infrequently decreased. The tendon reflexes are quite variable, oftentimes normal, often increased to the point of an intense clonic contraction. Much less frequently they are decreased or absent. It sometimes occurs that the reflex is increased in the lower extremity and normal in the upper extremity. In Tuczek's 300 cases one-half had increase in the knee-jerk up to the rapid patellar clonus, even with the slightest percussion of the tendon. In 35 cases there was dorsal clonus and increase of the tendon reflex of the upper extremity. In 8 cases the knee-jerks were absent, and in the remaining it was partly lessened and partly normal. Differences in the two sides were often noted.

Among the vasomotor disturbances is described a vasoparalytic dilatation of the veins and capillaries and not infrequently edema. The skin lesions are usually counted as trophic disturbances. Pellagra is usually described as a feverless disease. The temperature chart showed that during the active stage of the disease there is invariably a rise of temperature ranging from 99.5° to 102° F.

The urine is alkaline and deficient in phosphates. When the toxemia is intense there is the usual albuminuria.

What is called by most writers the third stage is characterized by a general atrophy of the whole body: the subcutaneous fat disappears and the patients present the appearance of advanced cachexia. Profound weakness necessitates rest in bed. The bladder becomes paralyzed and the diarrhea is uncontrollable. Death is usually directly

attributable to myocardial degeneration¹⁸ and its consequences.

In the very chronic cases there is frequently an acute terminal exacerbation, and it is this condition that the Italians have in mind when they speak of the "typhoid" pellagra. Evidently they are not familiar with the acute pellagra so common with us. This explains Belmondo's statement that "typhoid" pellagra is never primary, but merely an exacerbation of a very chronic case. It is in this terminal condition that the delirium is so wild. Tuzek claims that at autopsy fever could be found to have been due to a broncho-pneumonia. In our experience there is just as much cause for fever in pellagra as there is for fever in a large superficial burn which has become infected.

"Pellagra sine pellagra," or pellagra without skin manifestations, is a point of contention. Some observers consider erythema or atrophy and pigmentation of the skin essential for the diagnosis. Babcock, in South Carolina, at the present time has a number of such cases under his care. He says these patients have stomatitis, diarrhea, and disturbances of the nervous system. My own experience is too limited to make the diagnosis without reserve. However, I have under my care several cases which I have diagnosticated "pellagra sine pellagra." One of these cases gives the following history:

Mrs. O., aged sixty-three years. Five years ago she was seized with a peculiar attack which was thought to be apoplecticiform. She recovered from the attack, but has never been quite well since then. She has had repeated obstinate attacks of stomatitis and diarrhea. At present she is bedridden on account of profound weakness. She has an obstinate diarrhea and is quite emaciated. There is no erythema. She replies to questions with marked tardiness. The patellar reflex is absent. The pupils react to light and accommodation in rather an exaggerated degree. I am convinced that in many of the so-called cases of "pellagra sine pellagra" there is or has been a very mild erythema which is not visible at the time when the patient comes under observation. All pellagralogers state that the ex-

tent of the erythema is no index to the severity of the disease.

Recently there came under my care a white woman, aged forty-six years, mother of eight children, with a negative family history and a negative previous medical history. In July of this year she had an acute gastritis which was quite severe in character. Soon after this she developed diarrhea, and later a severe stomatitis.

She made a slow recovery. During convalescence the palms of her hands and the soles of her feet desquamated. On close inquiry I elicited the fact that early in her sickness her hands had a purplish cast which attracted attention at the time. Careful examination showed the last remnant of the upper border of what must have been the pellagrous erythema. Certainly, the lesion was very inconspicuous. At present this patient is a great sufferer. The pain in her hands and feet is constant and her hands show beginning contractures. She is unable to comb her hair or button her clothes. She walks with great unsteadiness and says she has the sensation of walking on roller skates. Her station is poor. The pupils react sluggishly to light and accommodation. The knee jerks are greatly exaggerated. Except for increased emotion, the mental condition is little changed. She is much emaciated and is losing ground steadily. Mistakes in the diagnosis are often made, owing to the fact that the order of appearance of the symptoms may be entirely reversed. I have seen stomatitis, diarrhea, and all the mental changes appear a year before the first indication of the skin lesion. It is very likely that in "*pellagra sine pellagra*" sooner or later there will be skin manifestations.

The pathological changes that occur in pellagra depend largely on the chronicity of the affection. As in ergotism, the most definite changes are in the spinal cord. These changes are just what the symptoms would indicate. In ergotism the posterior root zones are affected, but this does not occur in pellagra. The latter disease shows affections of the lateral rather than the posterior columns. Allbutt says the weight of the disease falls on the crossed pyramidal

tracts; the direct cerebellar tracts are not affected; the cells in the anterior horn are deeply pigmented. The lesions of the posterior columns occur chiefly in the cervical and upper dorsal regions, while those of the lateral columns affect the middle and lower third of the dorsal region.

In the eight autopsies which Tuzek reports the posterior columns were degenerated in seven. Of this number, in one the degeneration was limited to Gall's column and a medial strip in Burdach's column. In five the degeneration extended throughout the whole length of the cord. In one the lesions were found in the cervical portion alone. In four the dorsal region was the chief seat of the disease. In five the crossed pyramidal tracts were affected. In the first the affected areas extended from the upper cervical to the upper dorsal, with degeneration of the cells in the anterior and posterior horns in the middle and lower cervical. There was atrophy of cells in the anterior horns and Clarke's column of the upper dorsal. There was atrophy also of the anterior root fibers. In the second the degeneration of the crossed pyramidal tracts was more intense in the dorsal regions, but extended as high upward as the middle cervical and as low as the upper lumbar. In the third case the lesion extended throughout, but was especially marked in the dorsal portion. In the fourth case the lesion was confined to the dorsal portion, and in the fifth degeneration was massive and limited to the middle cervical portion. Tuzek further found abnormal pigmentation similar to senile changes, especially of the ganglion cells. He considered the presence of hyperemia, anemia and edema, together with the occasional inflammatory affections of the central nervous system coverings, as well as obliteration of the central canal of the cord—all a part of many chronic affections of the nervous system and, while present in pellagra, they should not be considered characteristic.

The changes in the brain are inconspicuous except for occasional fatty degeneration or calcification of the intima of the smaller vessels and pigmentation in the adventitia.

In one of my earlier cases, in which, as was above mentioned, an unusual malarial infection was thought to play a

part, the tissues were carefully studied by Dr. H. A. Cotton, Superintendent of the New Jersey State Hospital for the Insane. Dr. Cotton reported in part: "The cortex showed no reaction that could be called pathological. The topography was unaltered and the elements of the cortex were not affected by the malarial infection. There was probably an excess of pigment in the nerve cells, which could be accounted for by the patient's age. The blood vessels appeared a trifle thickened, but the fixed cells did not seem altered or to have proliferated at all, and the vessels were not increased in number. There was no evidence of general paralysis or other organic affections, and no evidence of cerebral syphilis. The plasmodia were very easily seen in the blood stream and in large numbers. The Weigert preparations for medullated fibers did not show any degeneration, but in the Marchi preparations there was a scattered degeneration in both cortex and cord. These scattered degenerations probably only meant that there was some toxic effect of the malarial infection. It was only a very moderate degeneration and of little significance."

The stamp on the nervous system can only be discovered after the disease has existed for years. As all of our cases had run only very short courses, the pathological changes were not marked.

Pigmentation and fatty degeneration of the thoracic and abdominal organs occur. To this is added atrophy, chiefly of the organs innervated by the vagus—the heart, kidneys, spleen, intestines, liver and lungs. There is atrophy also of the coats of the intestine, with occasional hyperemia and ulceration of the lower portion.

The pathological changes seem to be slow degenerations rather than inflammation and are probably not essentially progressive in character.

In 1776 the *Socita patriotica di Milano* offered a prize for a solution of the question of the etiology of pellagra and a means to combat it. Marzari, in 1810, suggested the relationship of corn in the etiology. Strombia, the elder, and Marzari claimed that the corn was deficient in nitrogen because it was sown late and gathered green. Forcher and

Roussel claimed that it was a disease of the corn which produced the toxin. Lombroso emphasized the fact that healed pellagrins when given good corn food became affected again. Pellagrins seem to show a susceptibility at certain seasons of the year for even the smallest quantity of pellagrous material. Corn ordinarily contains many microorganisms, and certain parts of the kernel make an excellent nidus. Lombroso concedes that the best corn is often most diseased and that the trouble is rather in some noxious agent which uses the corn as a host. The *acar*us *farinæ* was supposed to play an important role by making a point of entry into the kernel through which the noxious agent entered. Moisture is one of the greatest sources of trouble. The corn, besides being gathered green, is not always carefully handled and is in consequence poorly protected from moisture. It is said that the custom among the Italian peasantry of preserving pollenta for days and even weeks, allowing fermentation to occur, is the chief source of danger.

In studying the etiology of the series of cases occurring in my section, I was impressed with the fact that practically all of the corn used by the people came from Ohio and Virginia and in neither of these States had pellagra ever been reported. While by no means ready to accept the corn as the source of the disease, I am of the opinion that if there is any connection the noxious agent must appear after the shipping of the corn. Many Southern observers attach importance to the heating of the corn which so often occurs in the cars before they are unloaded. Atmospheric conditions probably play an important part.

Last spring I collected three samples of corn which I had reason to suspect of containing pellagrous material. These samples were placed in my laboratory, which during the summer months is a damp place. After an absence of several months I returned to find everything covered with mould. It occurred to me that the conditions were favorable for the development of any fungus, and I sent the three samples to the North Carolina Experiment Station.

Dr. F. L. Stevens furnished me with the following report:

No. 1.		Per cent.
Penicillium.		30
Aspergillus.		60
Syncephalstrum.		10
No. 2.		Per cent.
Aspergillus.		70
Penicillium.		20
Chetomium.		5
Syncephalstrum.		5
No. 3.		Per cent.
Mucor.		5
Penicillium.		45
Aspergillus.		50

Dr. Stevens considered each sample a good average grade of corn and suitable for food.

Various moulds have been brought forward as the etiological factor. Most common among these is the penicillium crustaceum, which was not found in any of the corn consumed by my patients.

Lombroso's pellagrozein is claimed to produce pellagra in the lower animals. While there are toxic symptoms produced, they are not sufficiently typical to be counted as pellagra. Two organisms have been isolated from corn. The first is a short bacillus producing an orange-yellow growth on agar-agar, staining by Gram's method and forming no spores. The cultures are abundant and gelatinous. It does not produce gas. This organism is non-pathogenic. The second bacillus produces spores. On agar-agar it produces faint round colonies, which also grow on glycerin agar. It liquefies gelatin. This bacillus, too, is non-pathogenic to rabbits. It corresponds with the *Bacillus mesentericus* or with the *Bacillus maidis* of Peltauf and Heider. This organism was isolated from corn meal and corn bread as well as from the feces of pellagrins. It is claimed that this organism is also found in the feces of the normal individual.

Majocchi, in 1881, described the *Bacillus maidis* as a very motile organism which he found in the bodies of pellagrins in the beginning of the disease. Cuboni found the organism in diseased corn, and claimed that it resisted the boiling temperature. Peltauf and Heider claimed that the *Bacillus maidis* developed like the *Bacillus mesentericus* or the potato bacillus, and that it was not always present in

the feces of pellagrins. They considered the organism non-pathogenic, but an alcoholic extract of the corn meal containing them caused narcosis, paralysis and death in mice. Babes and Sion produced symptoms resembling pellagra in various animals by the injection of this bacillus. Ballardine, working with the *sparisorium maidis*, was able to produce in man gastro-intestinal symptoms, but his results were not conclusive.

Tizzoni isolated an organism from the blood, cerebro-spinal fluid, organs and feces of pellagrins. With this organism he produced, without question, the disease pellagra in rabbits and guinea-pigs. Tizzoni also found this same organism in two out of nine samples of suspected corn. In these experiments Tizzoni infected twenty-eight animals. Of this twenty-eight, four were infected by mouth; three with pellagrous material, and one with a culture from the blood of a pellagrin. The remaining twenty-four were infected subcutaneously. Of this latter number, eight with the blood of a pellagrin, twelve with an organism isolated from the feces of a pellagrin and four from corn. The remaining twelve were infected with pellagrous material. The disease so produced ran an acute course of from sixteen to fifty days and a chronic course from eighty-seven to one hundred and five days. Autopsy showed lesions of the skin and also of the abdominal organs of a hemorrhagic type. The changes in the nervous system were varied and indefinite.

Tizzoni and Panichi, in a previous communication, claimed that they could only produce the disease experimentally when, in addition to their inoculations, the animals were fed on corn food. Lombroso was the chief supporter of the chemical theory of the decomposition of corn as the cause of pellagra. He experimented with great quantities of diseased corn containing *aspergillus*, *rhizopus*, *Bacillus maidis* and *acari*. The dogs on which he experimented were fed milk, bread and flesh, and on the administration of his preparation from the corn the temperature rose and the weight decreased. There usually appeared psychic and muscular torpidity, and in some cases anesthesia and

tremor. Out of ten cases, seven had diarrhea, and in one there was an erythema. In all, there were appearances in the dog considered the counterpart of pellagra in man. The feeding of bad corn meal caused erythema, stupor and dysphagia. He prepared from the corn an oil, a fluid extract and a tincture. He gave to twelve individuals daily the corn tincture, and in eight cases there was itching of the back and the face and loss of weight, in five cases diarrhea, and in five cases desquamation. The appearances were not exclusively those of pellagra, and the result is therefore not conclusive.

Neusser believed that corn contained a non-toxic glucoside produced by the *Bacillus maidis*, and that in the intestine this body is decomposed, producing a toxic substance, but that this only occurs when the bowel is already in a diseased condition. There is not sufficient ground for this view.

Antoniou reported seven cases fed on diseased corn in addition to meat and cheese. Of this number several became pellagrous, but even this observation is not counted as conclusive because of the possibility of the victims having been previously pellagrous.

Erba's pellagrozein, prepared from bad corn, caused convulsions, increased reflexes, narcosis and anesthesia. He noted that in summer his product was more toxic.

Babcock, quoting Sambon, says that the association of pellagra with the eating of maize is too universal to be ignored, and that, based on pathology and symptomatology, there is good ground for the hypothesis that pellagra is a protozoan disease allied with trypanosomiasis and syphilis.

I have isolated from the blood of a pellagrin in the active stage of the disease a bacillus which produced spores, is decolorized by Gram's method, and liquefies gelatin. Like the bacillus of Peltauf and Heider, it belongs to the potato bacillus group. It is probable that it is also the same as the very actively motile organism described by Majocchi. My observations on this organism are not sufficient for a detailed report at this time; however, it is altogether probable that Peltauf and Heider, Cuboni, Majocchi, Tizzoni, and myself have found at different times the same organism.



FIG. 1. V. S., Aged 12.
Acute Pellagra; death in
first attack.



FIG. 2. Same case, show-
ing lesion of neck and ears.



FIG. 3. Same case, show-
ing the lesions of the hands.

The prognosis of pellagra in this section is very grave. We have many evidences of the fact that when an infectious disease first appears in a country it is much more malignant than later on. This is well illustrated in the lower mortality among the Japanese troops in their recent war with Russia from beriberi (about 3 per cent.), while in a new country this mortality often reaches 60 per cent. The same condition obtains in measles and yellow fever outbreaks. Fulminating pellagra is an utterly hopeless disease. The death rate of the chronic pellagra is very variable, and it is too soon for us to report definitely on this subject. So far we have not observed a case older than three years.

The treatment of acute pellagra is of no avail. We have reason to suspect that the epizootic meningitis among horses is due to the same cause as pellagra in man. If the above-mentioned organism is the cause of pellagra and the horse is susceptible, we have reason to hope that the serum-therapy will soon come to our assistance. It has been shown that the blood of a healed pellagrino is curative in a guinea-pig experimentally inoculated with pellagrous material.

In the chronic cases it is possible that a cure may result from the removal of all corn food and general tonic treatment. Atoxyl is much vaunted just now, but in our hands the results have not been so brilliant as reported by the European pellagralogers.

In closing, I wish to acknowledge my gratitude to my fellow practitioners of North Carolina for their generous assistance in collecting data for this paper.

BIBLIOGRAPHY.

- Ramazzini. *Malad. des artisans* trad. par Fourcroy, Paris, 1777. Casal. *Rec périod. de méd. et de chir.*, Paris, 1735, and *Obsev. de méd. faites en Espagne*, Paris, 1791.
- Frapolli. *Animad. in Morg. vulga pellabo méd.*, 1771, Strombia, De pellagr. Obs. méd., 1790.
- Roussel. De la pellagra, 1845, *Bull. de l'Acad. de méd.*, t. xii, p. 929.
- F. L. I. Vallex. *Guide du Médecin Praticien*, Paris, 1853.
- Albutt's *System of Medicine*, 1905, vol. ii.
- Sherwell. *Journal of Cutaneous Diseases*, 1883.
- Tizzoni e Fasoli. Saggio di ricerche batteriol. sulla pellagra. *Mem. della R. Accad. dei Licei*, Sez. V. cl. di Scienze fisiche, matematiche e natura val. VI seducta del 1° Aprile, 1907. Tizzoni e Fanichi. *Ulteriori ricerche sperimentale sulla pellagra. Nota preventiva letta alla R. Accad. delle Scienze dell' Istituto di Bologna nella sessione del 24 febbraio, 1907. Rendiconti Gazz. degli Ospedali et delle Cliniche.* N. 48 anno 1907. Tizzoni. *Nuove ricerche battereologiche sulla pellagra.*
- Tiller B. *Gazzetta degli Ospedali e delle cliniche et.* 147-8 Dicem. 1907, La pellagre, Paris Thesis, 1906.
- F. Tuczek. *Klin. u. Anat. Stud ueber die Pellagra*, 1893. Review in *Annal. de Dermat. et de Syphil.*, 1895, vol. vi.
- F. M. Sandwith. *Pellagra in Egypt.*, *Br. Jour. of Derm.*, vol. x.

- C. Lambroso. Die Lehre von der Pellagra (Trans. from Fr.), Br. Jour. Derm.,
vol. x.
Spec. Path. u. Therapie Nothnagel, Band xxiv, Heft II, Abt. II and III.
Radcliffe-Crocker. Diseases of the Skin.
G. Procopi u. La Pellagra, 1903.
Sir P. Manson. Tropical Diseases, fourth edition.
H. Cerconi. Erythèmes pellagreux et E. pellag., Paris Thesis, 1903.
H. F. Harris. Medicine, iv, 3.
G. H. Searcy. Jour. Amer. Med. Assoc., xlix, I.
T. C. Merrill. Ibid., xlix, 11.
J. W. Babcock. American Journal of Insanity, lxiv, No. 4.
E. J. Wood. Jour. Amer. Med. Assoc., xlix, pp. 1891-1895.
R. H. Bellamy. Ibid., 1908, second half.
J. J. Watson. Journal of South Carolina Medical Association, November,
1908.
J. H. Taylor. Ibid.
E. J. Wood. Ibid.
N. M. Moore. Ibid.
J. L. Thompson. Ibid.
J. W. Babcock. Ibid.
H. H. Griffin. Ibid.
H. E. McConnelly. Ibid.
G. A. Neuffer. Ibid.
I. M. Taylor. Ibid.
E. M. Whaley. Ibid.
J. McCampbell. Ibid.
N. M. Moore. Journal American Medical Association, 1908, second half.
C. H. Lavender. United States Public Health and Marine Hospital Service
Report, 1908.
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SELECTIONS.

CLINICAL NEUROLOGY.

TABETIC TROPHIC LESION OF THE LEFT LEG.

We are indebted to the *Medical Times* for calling attention to the following:

The patient had contracted syphilis at 19 and took no treatment. The lesion in the malleoli of the left ankle was the first sign. The tabetic foot proper is recognized by Fereol and Charcot. But the present lesion, says Raymond, *Journal des Practiciens*, July 31, 1909, is rare.

Raymond ordered rest and small doses of iodid of potassium. Then periods of activity with mercurialization. At the same time, as in arthritic cases, special diet and remedies are indicated.

ARTERIOSCLEROSIS.—Diagnosis. Careful ophthalmoscopic examination frequently reveals the earliest signs of arteriosclerosis. *Bruner*.

Most prominent signs of beginning arteriosclerosis: Subjective: fatigue on slight exertion, abnormal sensation in the limbs with some difficulty of movement, slight pains here and there; flushed face, slight headache, insomnia, vertigo, slight loss of hearing; altered disposition; cardiac palpitation. Objective: vascular hypertension, accentuated second sound, without evident brain, kidney, or heart disease; pulse slower when standing than recumbent; thickening of retinal arteries with compression of retinal veins; trace of albumin in urine. Palpably hardened arteries are oftenest present in cases due to heavy physical labor, gout, rheumatism and typhoid.

TREATMENT. Quiet and regular life, avoiding sudden exertions, overwork, and nervous excitement. Dry, inland climate best, with altitude not over 3,000 feet. Moderate

exercise in the fresh air, carried only to point of slight perspiration. Diet: Carefully maintain general nutrition. Avoid stimulants and reduce meats. Best diet consists of milk, buttermilk, fresh and stewed fruits, vegetables, cereals, moderate amount of fats (preferably vegetable), stale bread. Physical measures: Massage, vibration to spinal region, and abdominal kneading. Electric light baths. Electricity valuable in 2 forms: 1. High frequency current, 10 to 20 minutes at a sitting, promotes elimination and lowers arterial tension. 2. Static current to the epigastrium, most useful where poor nutrition. Hydrotherapy very valuable; temperature of water is gradually reduced, reactive capacity of patient being studied.

Drugs: 1. Iodides of potassium, sodium and strontium in very small doses, with sodium or potassium bicarbonate. 2. Thyroid in small doses arrests progress of the trouble. 3. Course of mercurials every 2 to 4 weeks, preferably blue mass. 4. Lactic acid preparations, especially soured milk, buttermilk or lacto-bacillary tablets. 5. Iron, arsenic and malt where tonics needed. 6. Vasodilators (nitrites, nitroglycerin, sweet spirits of nitre). Where compensatory hypertrophy, keep pressure down just sufficiently to prevent dangerous complications. Where high tension with failing compensation, sparteine, blue mass and vasodilators useful. Prolonged lowering of blood-pressure is to be obtained by non-medicinal measures.—*Pope in Monthly Cyclopedia and Med. Bul.*, p. 82.

SULPHIDE OF CARBON PERIPHERAL NEURITIS.—The patient is a girl of 17, of small stature, who came into the hospital for emaciation, extreme weakness, and anæmia. The illness had begun somewhere about two years before, when she had come to town and taken up her lodging in a badly ventilated room which she shared with her sister. Besides general symptoms of ill-health she experienced a great falling off in her appetite, shortness of breath on exercise, and dysmenorrhœa. She had been employed in a factory where she made india rubber balls, her duty being to

steep the balls in a bath of sulphide of carbon and blow them up with a bellows.

Hardly a month after she had begun this work her sense of tiredness increased; she became thin; the menstruation ceased completely, and was replaced by persistent leucorrhœa. There was neither headache, nor epistaxis, nor loss of consciousness; she often complained, however, of coldness of her extremities, of pains in her back, and of painful spots on her flanks. Presently she noticed that her right hand was getting feeble, and that when she wanted to carry things she could scarcely do so, and this impairment of strength in the right upper limb became so marked that she came to the hospital. When seen both her hands presented an abnormal red colour owing to staining at her work. Her viscera gave no abnormal signs, except that there was a hæmic bruit over the heart. There was no pyrexia. As regards the nervous system, the first point to attract attention was a vasomotor disturbance in her extremities, especially in her right hand, associated with lividity and coldness. There was very marked paresis of the muscles of the right hand and of all the flexors in the right forearm; although the left was probably affected too, it was so much stronger than the right that it seemed to be relatively normal.

There were sensory changes also; great impairment of cutaneous sensibility extended up on to the right forearm for 12 cm. on the radial side, and 15 cm. on the ulnar side. Above this level there was more sensibility, but not normally until above the elbow. The patient was unable to distinguish objects by their shape when she felt them with her right hand, yet muscle sense was retained. There was no impairment of sensation in the left arm, and the lungs were healthy. The patient had a good intelligence, and was in no way hysterical. Under treatment by means of hot baths, electricity, and medicines the paræsthesia gradually diminished, but it was a considerable while before the patient was anything like cured.—*The Hospital*.

DORSALIS. By Tom A. Williams, M. B., C. M., Edin., Washington, D. C. *Amer. Jour. Med. Sci.*, March, 1910.

Upon the data furnished by the cases of Clovis Vincent, one of which is here reproduced with the original figures, the author discusses the genesis of the ocular paralyses of tabetics, including the Argyll Robertson pupil. As Vincent did not examine the sympathetic fibres, the data of Roux's investigation of the spinal sympathetic are invoked, on the hypothesis that reflex iridoplegia may sometimes be an inhibitory phenomenon "due to failure to dilate in the absence of light."

There follows a discussion of the pathogenesis of the fugitive palsies, for which the author follows Nageotte in postulating a chronic specific meningitis, probably, as Vincent believes, directly continuous with that often occurring in secondary syphilis. Clinical recovery is explained by the great tendency of the granulomata to be absorbed with negligible cicatrices permitting of a resumption of function, except when secondary degeneration has occurred in the central nervous system.

To those who have recently reported cases denying the role of anterior radiculitis in the genesis of tabetic myopathy, the author points out the polymorphism of syphilitic lesions, which may in rare cases be globally intoxicative, as in the cases of Crouzon and Villaret and the experimental ape of Schroeder, as well as possibly the poliomyelitis cases of Pierre Marie, Jr. and of S. A. K. Wilson. And of course vascular disease may be suffered by tabetics as well as by other syphilitics. It remains that "meningitis is the cause of the vast majority of the symptoms of tabes and to this rule the cranial nerves are no exception."—*Author's Abstract.*

ON THE RELAXATION OF THE MUSCLES IN ORGANIC HEMIPLEGIA. By Noica and V. Dumitrescu. Bucharest. *Revue Neurologique*, 1910, Jan. 30.

Babinski has regarded hypotonia as a sign of palsy of cerebral origin. The authors, in the service of the Pitie and later at Bucharest, have found that hypotonia, as shown by the more acute angle to which the forearm can be flexed,

is not more frequent than hypertonia. The latter patients always show contracture and exaggerated reflexes. The former may show no synkinesis or contractures, although the reflexes are exaggerated; but they show pronounced muscular atrophy. Intermediate cases are found.

The hyperflexion of the forearm is permitted by the relaxed triceps. In these cases, extension of the forearm reveals a latent contracture of the flexors. Thus, the hyperflexion is permitted by the atrophied muscles unless there is contracture of the triceps, in which case there is hyperflexion. Hence hypotonia cannot be invoked to explain the hyperflexion sign, which is due to atrophy of the muscles, except when this is overcome by the spasticity which results in contracture. The opinion of the authors that the muscles are atrophied appears to emanate from the softness they ascertain on palpitation, and it might thus be well to accept their conclusions with reserve.—*Tom A. Williams.*

JUVENILE SPASMODIC ARTEREOGNOSIS. By George Guillain and G. Laroche. *Revue Neurologique*, 1910, Jan. 15.

A remarkable case beginning with paraesthesia in one hand and later in the feet, and progressive severe loss of the sense of attitudes of both hands and wrists, along with exaggeration of all the reflexes and paresis of the forearms and hands with synkinesis and general exaggeration of deep reflexes with plantar extension. The movements of the arm can be controlled only when the patient views them. There is no complete artereognosis in both hands, with some loss of the appreciation of weight. There is no loss of tactile or thermic sense. Vibrations cannot be appreciated in the hand, and are only slightly so in the forearm. There is no intentional tremor nor cerebellar dysergia.

The authors exclude infantile paralysis, pathominia and insular sclerosis, they believe that they are dealing with a systemic dystrophy of the cortex.—*Tom A. Williams.*

ON THE FREQUENT ABSENCE OF PERMANENT CONTRACTURE IN INFANTILE HEMIPLEGIA. By E. Long. *Revue Neurologique*, 1910, Jan. 15.

The earliest writers did not regard contracture as a constant feature of infantile hemiplegia. Long presents several cases in which it was absent; thus showing the error of the classical doctrine which has been largely derived from the study of the hemiplegia of adults. This over-absolute opinion has partly also arisen because the disease has been chiefly studied in asylums, where only the graver cases are sent. The form without contracture is believed by Long to be not less frequent when one considers the cases in private practice and in hospitals.

The chief feature of the infantile form is dysmetria, which is an essential rather than an epiphenomenon. It is the contracture which is an added phenomenon; for it is not always demonstrable even on movement; and it is not a function of synkinesis nor in proportion to the increase of reflexes. Facts are still insufficient to explain post-hemiplegic contractures. One of Long's cases shows that their absence is not due to muscular atrophy; and another case shows that they are not proportional to athoptosis.—*Tom A. Williams.*

THE PITUITARY BODY CLINICALLY CONSIDERED. From a paper on the internal secretions clinically considered by Oliver T. Osborne, M. A., M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine at Yale Medical School, New Haven, Conn.

It is the object of this paper to present an abstract of the present knowledge of the physiology of the glands that furnish internal secretions; of the clinical conditions that disturbances of these glands are known to cause; of abnormal clinical conditions that disturbances of these glands are sometimes considered to cause; of the influence that can be exerted on the secretion of these glands by drugs and preparations of glands; and of the different physiologic activities that can be caused by the administration of gland preparations.

The glands to be considered are those that are known to furnish secretions which do not reach the blood and

lymphatics by ducts. They are the pituitary (hypophysis cerebri), the thyroid, the parathyroids (epithelial bodies), the pancreas, the suprarenals (adrenals), the ovaries, and the testicles.

Also should be considered the glands and organs which have been assumed to furnish internal secretions. Such are the parotid, the thymus, the mammary, the liver, the kidneys, and the prostate.

While little is positively known of the function of this gland, it has been lately shown that the whole of the gland cannot be removed without causing death within twenty-four hours, but, if a certain part is left, death does not occur. Extracts from the infundibular portion of the gland raise the blood pressure and increase the cardiac activity, but this action is much less than that which occurs when suprarenal is administered. The blood pressure is raised principally by the action of the extract on the walls of the arterioles. Extracts from the hypophysis portion of the pituitary have been shown to cause slowing of the heart and prolongation of the systole.

This gland and the suprarenals seem to be the only glands of the body that furnish vasoconstricting stuff, and it has been claimed that the pituitary regulates the intracranial blood pressure, regulates diuresis, and exerts a tonic action on the sexual organs. Extracts from the infundibular portion have been shown to cause diuresis, whether the blood pressure is increased or not. The colloid substance of the gland perhaps represents a secretion.

The pituitary seems to be closely related in its functions to the thyroid gland; when the latter is diseased the hypophysis often becomes hypertrophied, and when the pituitary is diseased the thyroid has been found hypertrophied.

The relation of the pituitary secretion to the growth of the skeleton has not been determined, but the pathologic condition of this gland in acromegaly would seem to demonstrate that it has a function in bone development and bone growth that is of prime importance.

The consensus of opinion is that a diseased condition

of the hypophysis cerebri is, in all probability, a cause of the disease of acromegaly. Instances of disease of the pituitary in which acromegaly does not occur do not militate against the acceptance of this etiology, as there may be supernumerary glands which furnish secretion compensating for defects in the pituitary, or disease of the pituitary may be so rapid as not to allow the condition of acromegaly to occur. It is quite possible that when autopsies on patients whose deaths have occurred early in acromegaly have not shown macroscopically any changes in the hypophysis, microscopic examinations would have shown hyperplasia, and one or more instances are on record which have shown this condition to be present. . . . The thyroid can supplement, and perhaps does so frequently, the work that the pituitary should accomplish.

AEROPHAGIA. By Douglas Vanderhoof, A. M., M. D., Adjunct in Medicine and Lecturer on Physical Diagnosis, Medical College of Virginia, Richmond, Va. Read before the Medical Society of Virginia.

One of the most common complaints of patients suffering from so-called indigestion is belching, or eructation, of gas. These patients frequently say that everything they eat "turns to gas" and they occasionally volunteer the information that they are afflicted with "gastritis." They invariably believe that the condition is due to the fermentation of food in the stomach, and in most cases they have been treated with restricted diet and a variety of drugs by physicians who also believe that a process of fermentation is responsible for the symptom. The purpose of this paper is to show that the gas which these patients expel is nothing but atmospheric air, in the vast majority of instances, and that the condition is directly dependent on the fact that these patients, all unconsciously, swallow the air with their food or between meals.

Aerophagia, or air-swallowing, is seen in its most striking form in hysterical subjects and in other individuals with well-marked neurotic stigmata. In such cases enormous

volumes of air may be expelled. Instances are on record of patients who have belched over 5,000 times in twenty-four hours; and the amount of air eructated has been measured and found to exceed 200 liters. It is evident, in examples of this kind, that the quantity of air expelled is many times in excess of that which could possibly be produced by any conceivable process of fermentation. Furthermore, the air expelled in such cases has been collected and analyzed by several investigators, who have shown that it approaches in composition atmospheric air, being composed almost entirely of nitrogen and oxygen with an admixture of but a small quantity of carbon dioxid, the latter being derived from the decomposition of the carbonates in the food or in the alkaline saliva.

This interesting condition was first described in 1814 by DeJardin, who cites the case of a conscript who, in order to escape military service, swallowed large quantities of air which produced abdominal tympanites. Since that time a number of writers have maintained that air can be introduced into the stomach during respiration and especially during deglutition of saliva and food. Bouveret, in 1891, published an elaborate discussion of the mechanism of this affection and gave it the name "aerophagia." The condition, as it occurs in the extreme cases, has become a well-known clinical phenomenon. The eructations are almost always accompanied by more or less noise. . . The worst case I have seen was in a young newspaper reporter who had attacks when he would belch for several hours at a time. The act was accompanied by a to-and-fro movement of the head; each time the head came forward he would let out loud reverberating sounds that could be heard throughout the length of a large hospital ward. Other cases are related.

HYSTERIA AND SURGERY IN THE ARMY.—(Surgeon General Herhold, *Deutsche Military Zeitschrift*, March, 1910).—The last decade shows a decided increase of hysteria in men. The purely accident hysteria is especially noticeable since the introduction of the accident insurance law. Nonne

says, "If one wishes to observe hysteria nowadays, he must go to hospitals for men, not women." The number of patients with hysteria in the Prussian army has during the last nine years increased from .029 per M of the total sick to .068 per M, that is from 149 cases in 1897-1898 to 359 cases in 1905-1906.

The author reports a series of very striking examples of hysterical soldiers who developed contractures corresponding to positions, in which a diseased or injured limb was kept for some time after a trivial injury or disease. The following is a brief statement of some of the writer's cases. A sergeant sustained a moderate sprain of the right ankle in jumping a ditch. He was not treated for it at all. After a month and a half he reported sick on account of a contraction of the flexor muscles of the foot, simulating an inflammatory condition of the ankle joint. Treatment did not improve the condition. He was finally discharged on a certificate of disability. About nine months later the author met the patient, who informed him that he was entirely well. The condition had gradually disappeared without treatment. In another patient contraction of the psoas muscle simulated hip joint disease and psoas abscess. The patient held his left leg flexed at the knee, turned outward and abducted. In the left lower abdominal region a hard tumor mass could be plainly felt. No injury had occurred. Patient had rapid pulse, but no fever. Under an anesthetic the abnormal position of the leg and the tumor disappeared. Hysteria was the cause of his discharge from the service. A third soldier sprained his back by lifting; later he developed contracture of the lumbar muscles, simulating disease of the spinal column, "hysterical scoliosis." Examination revealed no pathological change. Many hysterical stigmata were discovered. A train soldier presented an hysterical kyphosis, which could only be removed temporarily by suggestion under deep hypnosis. Another had obtained a slight injury of the right foot by leaping; later he complained of cramps and severe pains in his right leg. Any attempt to flex the leg caused a strong contraction of the extensor muscles,

making flexion impossible. Hysteria stigmata were found.

The prognosis is unfavorable as long as the patient remains in the service. The treatment, such as baths, electricity, etc., is of little value.—*Fred J. Conzelmann, Excerpt for Military Surgeon.*

BRAIN TUMORS AND OPTIC NEURITIS.—Although we have made great progress in the diagnosis of intra-cranial lesions during the last decade, there is much more for us to learn; so that a recent contribution by Paton (Brain, 1909, No. 125), dealing more particularly with ophthalmoscopy as applied to nearly 400 cases in Queen's Square Hospital, London, the results being in every case checked off either by the surgeon or the pathologist, is peculiarly welcome. This is perhaps the first sustained effort in this direction, and the conclusions are exceedingly helpful.

Briefly summed up, Paton has found that precentral tumors always show a considerable amount of optic neuritis, postcentral a moderate amount, and often for a short time only. Severe neuritis is also found in tumors of the optic thalamus and midbrain, and of a less grave character in cerebellar and temporosphenoidal lesions. Subcortical tumors, on the other hand, have a mild neuritis, and this in only 50 per cent. of cases.

He finds any conclusions based on the eye affected very untrustworthy, the neuritis being just as often as pronounced on the affected side as on the uninjured. Neither does the pathological nature of the neoplasm play any part in the subsequent neuritis.

There are two regions of the brain in which new growths are fairly common without causing any lesions in the eye—the pons and the white matter of the cerebrum. Sometimes we may find optic atrophy without preceding edema, if the neoplasm exerts constant pressure upon the optic nerves, or upon the chiasms.—*Editorial by F. A. C., in Canadian Practitioner and Review.*

AN UNDERWEAR HEALTH TEST.—Surgeon-General Torney, in his annual report, describes an experiment now under

way in the Philippines. One thousand soldiers stationed there have been set apart for an underwear test. Half of them are wearing the somber white or whitish color affected by the ordinary, middle-aged family man, while the second five hundred are gaudy in brilliant orange-colored undergarments. The experiment has been devised to test Major Woodruff's theories regarding the banefulness of sunbeams. He believes it is the actinic rays of the sun, rather than the heat rays, which sap the vitality of the Northerner in the tropics. If the body is protected from the former—as it is, apparently, by yellow underclothes—the health of the soldier should be improved. At the end of a year the hospital records of the orange-colored five hundred will be compared with those of the ordinarily underclothed controls. Statistics are proverbial liars, but something interesting if not convincing may come of the test.—*Collier's*.

SACHS ON RAYNAUD'S DISEASE.—The author regards Raynaud's disease, erythromelalgia, and allied conditions as far more often the expression of disease of the peripheral blood vessels than associated with central nervous disease, Raynaud's disease being a pure angio-neurosis, either occurring as an independent form of disease or in association with some central nervous affection. From observations upon an unusually large number of such cases it is probable that malnutrition, premature arteriosclerosis, and occupations involving a retardation of the venous circulation, for example, tailoring, sewing machine work, etc., largely enter into the etiology, and although a large number may be due to syphilis, it would seem that the rest in bed, with elevation of the foot, application of heat, etc., by improving the return circulation, does more to improve the condition than can be brought about by severe antisyphilitic treatment. Pathologically, marked interference with the peripheral blood supply is present in all classes of cases, and their study has drawn attention to the importance of routine examination of the dorsal artery of the foot. Raynaud's disease and erythromelalgia are often associated

with one another, the types blending so readily that any marked line of demarcation cannot always be drawn. Clinically, the disease may at one point correspond closely with the erythromelalgia type, and later with the Raynaud's type, erythromelalgia being relative frequently associated with dry gangrene. Cases occur also which at the outset are typical of Raynaud's disease, but later might well be designated cases of spontaneous gangrene due to obliterating endarteritis. Occasionally Raynaud's disease is associated with chronic rheumatism, and with cases of cerebral endarteritis, and attention is called to the association also of intermittent claudication with symptoms of the disease. Notes of six cases are given typifying the points to which attention is directed.—*Amer. Jour. of Med. Sciences.*

NEURO LEUKAEMIC PRIAPISM.—During the last ten years Professor Warthin has seen three cases of very prolonged and continuous priapism in leukæmic subjects. The features were in all three cases practically identical, and one of the most extraordinary was persistence post-mortem. This is ascribed to leukæmic thrombosis of the corpora cavernosa. In one case the condition persisted for fully seven months before death, and in the others for periods of lesser, but still considerable, duration. In each case there was no pain, though some difficulty in urination was experienced; sexual feeling was always entirely absent. This extraordinary symptom is apparently one of great rarity. Thus in 1907 Terrier and Dujarier could collect but 48 cases, and 16 of these were in leukæmia, which is the commonest single cause. It would also appear that priapism may be the precursor of other leukæmic symptoms, and it is said to be present in 25 per cent. of all the cases of this disease. Professor Warthin doubts the nervous hypothesis of its ætiology, preferring that of thrombosis, which explains better the persistence after death and is supported by microscopical examination of the tissues in his three cases. Obstructed venous outflow from the corpora cavernosa by a tumor or a collection of blood-clot has also been suggested as an explanation of continued priapism, and the author admits that this may

account for some cases.—*The Hospital*. But these facts do not obliterate the nervous element in this symptom.—*Ed*.

CLINICAL PSYCHIATRY.

THE TREATMENT OF DISEASES IN SENILITY.—I. L. Nascher, of New York, says that the neglected old methods of treatment are many of them useful in treating the diseases of senility. Processes that are pathological in maturity are physiological in senility. Efforts must be made to retard these senile processes. The harmonious relation of the altered functions must be maintained. In senility the heart, when its action is increased, hastens its own decay. Toxemia from decomposing food waste which has not been voided owing to lack of peristaltic activity must be combatted and the resulting weakness overcome. Incidental complications of disease will cause loss of life if not combatted. Vasoconstrictor cardiac stimulants given for weak heart without regard to the condition of the cerebral vessels may cause apoplexy. Two main causes of death are exhaustion or paralysis of the heart and asthenia. The author analyzes the effects of the cardiac tonics, and deprecates the use in the aged of those that increase arterial tension. Asthenia may be combatted by diet and abstinence from fatigue. Strychnia and phosphorus are excellent tonics for this condition.—*Medical Record*, December 11, 1909.

Abstracts of papers read before the Medico-Psychological Association at Washington, May 3-6, 1910.

"BRAIN FINDINGS IN DEMENTIA PRÆCOX." E. E. Southard, M. D., Boston, Mass. A clinical and anatomical analysis of sixty-three cases of dementia præcox and allied conditions, examined at the Danvers State Hospital, Massachusetts. About 40 per cent. of the cases were anatomically impure, since they presented coarse atrophy, destructive arteriosclerosis, or other features which have little or nothing to do with dementia præcox. To the residuum, and especial-

ly to some twenty-nine cases clinically above reproach, attention is particularly drawn. Over half of these cases showed certain slight macroscopic anomalies or minor acquired lesions, which cannot be ruled at once out of court as having nothing to do with dementia præcox. The anatomical data, insofar as they do not depend upon visible atrophies or aplasias, are the result of a systematic search for mild degrees of palpable sclerosis, both general and local, in brains examined at Danvers Hospital during recent years. Microscopic examination has confirmed and extended the macroscopic data. The cortical localization of lesions and anomalies in certain cases, as well as a cerebellar group of cases, is particularly considered.

"A DISCUSSION OF THE MENTAL MAKE-UP IN THE DEMENTIA PRAECOX GROUP." August Hoch, M. D., New York, N. Y.

Analysis of the most common form of make-up found in the dementia præcox group, which has briefly been termed "shut-in personality." Its frequency and the fact that it is found chiefly in the deteriorating cases point to its importance, but we do not know as yet what the essential features are, hence, what to look for in the milder cases. Lack of adaptation and lack of a certain aggressiveness in the sense of getting into contact with a reality are evidently important traits. Comparison with the hysterical make-ups and the make-ups of the so-called degenerates—types which in contradistinction to dementia præcox do not lead to deterioration.

"THE INTERMITTENT FORMS OF DEMENTIA PRAECOX." William Rush Dunton, Jr., M. D., Towson, Md.

In a paper read before the Association at its last meeting attention was drawn to an unusual form of insanity which it was proposed to name the Cyclic Form of Dementia Præcox, as the cyclic course was the most striking characteristic, yet in their so-called normal periods the patients showed symptoms of dementia præcox. It was stated that this form was apparently closely allied to that form of maniacal depressive insanity known as *folie circulaire*, and that it seemed to point to a middle ground, or connecting link, between the maniacal-depressive group and the dementia præcox group.

The present paper is a study of a somewhat similar form of dementia præcox which more nearly resembles the recurrent forms of maniacal depressive insanity, and to which the name of Intermittent Form of Dementia Præcox is given. A number of case abstracts are given to illustrate the clinical course of these cases, and attention is called to the diagnostic and prognostic importance of certain symptoms.

It should be understood that the term dementia præcox is used in the broad sense that it originally was by Kraepelin and is a "provisional" grouping of all cases which dement, exclusive of the organic dementias, and which show the dementia præcox syndrome of apathy, eccentricities and dissociation.

The separation of these forms serves to make the dementia præcox group smaller, to bring out the diagnostic and prognostic importance of certain symptoms, and points out a closer relationship between the maniacal-depressive group and the dementia præcox group than has been generally conceded.

"POSSIBLE PREVENTIVE MEASURE IN INSANITY." Albert Warren Ferris, M. D., Albany, N. Y.

The imperative need of preventive measures as determined by the increase of insanity. Comparative figures of the increase in New York State. The preventive measures are as follows:

1. Field work by special physicians attached to hospital staffs, consisting of investigation and improvement of home environment, precipitating factors, and undermining agencies.
2. Social service by lay committees. Reading, recreation, diet, child-care, etc.
3. Co-operation of the profession and of special societies.
4. Education campaign. Lectures with moving pictures teaching avoidable causes of insanity.

"IMMIGRATION WITH SUGGESTIONS REGARDING CHANGES IN THE LAWS." Sidney D. Wilgus, M. D., New York, N. Y.

Causes of immigration. Ratio of insanity amongst foreign-born twice that of the native-born. This largely due to the incoming class (peasant type) with its degeneracy and alcoholism on both points of which it exceeds the native population. Measures of protection given to Federal and State authorities. Inefficiency of the means now in use and additions to the law urged looking to better protection of the present tax rate and to the future stability of the community.

"IMMUNITY IN RELATION TO PSYCHIATRY." John G. Fitzgerald, M. D., Toronto, Ontario.

This paper deals first with certain aspects of the research side of Psychiatry. Shows how with very considerable improvement in routine, conditions have vastly improved. Immunity as related to internal medicine including Psychiatry. Immunity as especially related to Psychiatry. Advances as a result. Special diagnostic methods that have proven of value. The Wassermann sero-diagnostic method. Factors entering into the reaction. Our knowledge of the antigen. Facts determined by present authors Results.

"THE HISTORY OF THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION." Henry M. Hurd, M. D., Baltimore, Md.

1. The scope of the work should be to give an adequate account of the beginnings and progress of the movement to furnish institutional care for the insane of the United States.

2. Difficulties in the execution of the task are due to lack of records and material, and a lack of personal responsibility on the part of many for the completion of the work.

3. The work needs the co-operation of every member. Records of corporate, state and private hospitals should be searched and materials should be gathered from persons who initiated the movement for their establishment. The acts of legislatures, messages of Governors, extracts from old reports, etc., should be gathered and sent to the committee.

4. Histories of asylums and hospitals should be given. Histories of individuals, superintendents, medical officers and trustees should be gathered. Epoch-making improvements in architectural arrangements and methods of treatment should be noted.

5. Every member of the American Medico-Psychological Association should feel a personal interest in the work and a responsibility for its completion. Bricks cannot be made without straw, nor can history be written unless the materials are procured.

6. If materials are available, the committee will gladly do the work.

7. The method of publication should be considered and the Association should give the committee instructions in the matter.

"ALCOHOLIC AMNESIA." Charles W. Pilgrim, M. D., Poughkeepsie, N. Y.

Clinical reports of four cases of alcoholic amnesia.

Case 1. A chronic alcoholic with amnesia, ambulatory automatism and disordered personality, followed by gradual improvement and comparative comfort for two years, superseded by marked deterioration.

Case 2. A periodical drinker with ambulatory automatism, and the apparently rational execution of a deed for fictitious property of which act he was totally amnesic.

Case 3. An alcoholic with amnesia, ambulatory automatism and loss of identity of three weeks duration, Improvement under suggestive treatment.

Case 4. An alcoholic with periods of amnesia during which he performed his ordinary work of shirt cutter for as much as two days at a time, without attracting the attention of his foreman or fellow workmen. Restoration of the dissociated memories by the Sidis hypnoidal method after a period of three months.

"THE ETHICAL ASPECTS OF EXPERT TESTIMONY IN RELATION TO THE PLEA OF INSANITY AS A DEFENSE TO AN INDICTMENT FOR CRIME." Carlos F. Macdonald, M. D., New York, N. Y.

The present status of medical expert testimony. True and false experts. An expert should never lend himself to the side of a case in which he does not believe. Conscience the only safe guide in such matters. Acting as assistant

counsel and appearing as expert witness in the same case derogatory to dignity of medical profession. Reforms that have been suggested. None of them feasible or likely to be carried into effect. Why? Impossible to devise any method of presenting expert testimony in criminal cases that will supplant present one short of a change in Federal constitution. Constitutional obstacles to legislation that shall confine a defendant to the opinions of officially selected experts. The only feasible reform in present methods lies in the hands of the medical profession itself. The hypothetical question. Importance of. Its abolition not feasible, but a change in the rules of evidence relative thereto should be made. The legal definition of insanity, that is, the knowledge of right and wrong test, unscientific, behind the age and not acceptable to alienists, but being the law in substantially every state in the Union the latter must abide by it. A large majority of cases in which insanity is offered as a defence know the difference between right and wrong, in the abstract. Should insanity as a defence be abolished? etc., etc.

"INSANITY AMONG ADOLESCENT CRIMINALS." Charles H. North, M. D., Dannemora, N. Y.

Thirty-six per cent. of the patients thus far admitted to the Dannemora Hospital for insane convicts have been adolescents. Thirty-four per cent. of these have been diagnosed as dementia præcox and forty-five per cent. as imbecility with insanity. Particular mention is made of a psychosis of short duration included under the heading *imbecility with insanity*. Here the term imbecility is given a rather broad interpretation. The defect may be chiefly moral in its nature, but it is usually accompanied by other indications of constitutional inferiority. These patients prove to be unequal to the requirements of reformatory routine which are readily met by the general run of inmates. The symptoms include depression, elation, disturbances of apprehension and attention, absurd delusions and hallucinations, often of a dreamy character. Recovery occurs in from two days to two weeks after admission. The attacks are of shorter duration than those usually described as exhaustion psychoses

and there has been no opportunity for acute intoxication from drugs. There has been, however, the shock of legal conviction and sentence with confinement in the reformatory, where discipline is rigid and where considerable individual effort is required. It has been repeatedly demonstrated that these conditions with certain poorly equipped, unstable and undisciplined youths are sufficient to bring on the psychosis described.

“SYPHILITIC DISORDERS OF THE BRAIN. A GROUP ILLUSTRATING THE MENINGEAL FORMS.” LANTERN DEMONSTRATION. Charles B. Dunlap, M. D., New York, N. Y.

The number of cases found in state hospitals is considerable. In the majority of cases of Syphilitic Meningitis gummata are not found, the diagnosis can nevertheless be made with almost the same degree of certainty as when they are present.

Diagnosis is based upon a diffuse or patchy infiltration of the meninges and vessel sheaths with lymphoid and plasma cells; associated with this is usually an obliterative endarteritis of some of the blood vessels.

Differentiation of other forms of chronic meningitis which resemble the syphilitic form is usually not difficult, and is based on difference in the character or distribution of the exudate, and on differences in the reaction of the blood vessels.

“THE ORGANIZATION AND CONDUCT OF THE ACUTE SERVICE IN PUBLIC HOSPITALS FOR THE INSANE.” Frank P. Norbury, M. D., Kankakee, Ill.

Organization—Based on the “Hospital Idea.” *Service.* Physician of training and experience. Interne physician qualified for laboratory work, physical and mental. Charge nurse, the best qualified obtainable. Nurse’s assistant, most experienced. Masseur or masseuse in attendance. *Equipment.* Single rooms equipped for rest methods of treatment. Ward. Two room dormitories equipped for rest methods of treatment. Dormitories (larger) equipped for rest methods of treatment. Day room and Salorium away from rooms

used for treatment. Dining room for convalescents and nurses only. Serving room equipped to care for trays for rest cases. *Conduct*.—Based on "*Hospital Idea*." 1. Reception of cases, legal features, histories; 2. Examination of cases—*physical* (1) fluids of body—urine, blood, and cerebro-spinal fluid, etc.; (2) physical findings—stomach, feces, etc.; (3) neurological; (4) visceral organs. *Mental*—Usual scheme for purpose of classification. 3. Study of cases—mental, physical. 4. Systematized case records: Individual record daily, weekly and monthly. Psychological or Conduct chart. Weight chart. Sleep chart, Blood pressure chart. Blood examination chart. Urine chart. Feces chart.

Discussion by—

George H. Kirby, M. D., New York, N. Y.

Harry W. Miller, M. D., Washington, D. C.

"CARDIO-GENETIC PSYCHOSIS." REPORT OF A CASE WITH AUTOPSY." Henry A. Cotton, M. D., and Frederick S. Hammond, M. D., Trenton, N. J.

The desirability from the standpoint of classification and prognosis of placing in this category certain types of cases previously erroneously classified and improperly understood. Such cases usually diagnosed as arteriosclerotic brain disease, dementia præcox, manic depressive insanity, exhaustion psychosis, febrile and toxic deliria, from which a careful differentiation is necessary; clinical and anatomical basis upon which the differentiation is made; cardio-genetic psychosis concerned with quantitative circulatory disturbances due to the mechanical effects of cardiac disease, as distinguished from qualitative disturbances associated with certain types of well-known toxic conditions in which the psychic symptoms are displaced, such as pernicious anæmia, chlorosis, exophthalmic goitre, arteriosclerosis, etc.; the important action of psychogenetic factors as precipitating causes, two types clinically considered, first, cases with characteristic psychic disturbances extending over a considerable period of time; second, cases where such phenomena developed shortly before heart failure and death. The case we report belongs to the first group. Clinical course, symptomatology. Pathological anatomy illustrated by drawings.

"DEGENERATIONS OF INTERCELLULAR NEURO-FIBRILS WITH MILIARY GLIOSIS; A CHARACTERISTIC PATHOLOGICAL PROCESS IN CERTAIN PSYCHOSES OF THE SENILE PERIOD." Albert M. Barrett, M. D., Ann Arbor, Mich.

In this paper are presented clinical descriptions and the report of the pathological findings in three cases of a peculiar type of psychosis, occurring in the pre-senile or senile period. The clinical course is that of a progressive dementia with confusion, disorientation, profound memory disturbance, and neurological disturbances, symptomatic of structural alterations in the central nervous system. In all cases there occurred a characteristic pathological process in the cortex. Among the nerve cells were many with peculiar alterations of their neuro-fibrils. Scattered through the cortex were numerous "plaques" or miliary foci of necrosis, which later become encapsulated with neuroglia fibers. An intimate relation apparently exists between the neuro-fibril degenerations and the "plaques." The brains in all cases showed extreme general and focal atrophies. Attention to this condition has been recently directed by several descriptions of plaque formation in the central nervous system.

"METHODS OF DEALING WITH THE CRIMINAL INSANE. DEFECTS IN PRESENT METHODS AND SUGGESTED REMEDIES." Austin Flint, M. D., New York, N. Y.

1. The dangerous character of many of the criminal insane. Their detention and restraint in a special state hospital is a duty cast upon the state.

2. To facilitate diagnosis, prognosis and judicious treatment of the criminal insane and their release at the proper time and under proper conditions, the medical record of each case should accompany the order or commitment and be incorporated in the case-book of the hospital.

3. The superintendent of the hospital should make reports as to the mental condition of inmates to the courts at stated intervals, to facilitate the prompt return to the Sheriff of such inmates as may become sane.

4. When a plea of not guilty by reason of insanity is entered it should be made mandatory for the court to insti-

tute an investigation as to whether the defendant is capable of understanding the proceeding and making his defense, before a trial is had.

5. The misuse of the writ of *habeas corpus* by the criminal insane in state hospital and suggested remedies.

6. Evils of the practice of dismissing indictments against the criminal insane while they are in custody in a state hospital.

"MILD MANIC STATES OR CYCLOTHYMIAS." Smith Ely Jelliffe, M. D., New York, N. Y.

Cyclothymia: its definition—original concept as conceived by Kahlbaum. A cyclical psychosis—term restricted to the milder types of the manic depressive attacks, particularly with reference to constitutional excitements and depressions too mild to be designated as psychoses in the ordinary acceptance of the term.

General Symptomatology; recital of cases; the alliances to paranoid states—artistic and literary performances and medico-legal problems.

"MILITARY PSYCHIATRY." Robert L. Richards, M. D., Washington, D. C.

Races differ in their temperament and manifestations of mental diseases. Different social classes give different pictures of mental diseases. Military organizations are composed of selected men, of specified ages, and they present peculiar problems in psychiatry. This fact is shown in the experiences of different countries. The following are the most important problems:

1. Military organizations show a larger number of acute recoverable cases than does the civilian population.

2. Because of the nature of military life the military insane are potentially dangerous to a large number of people.

3. While recovered cases may succeed in civil life they can have no place in military life.

4. Psychoses arise at the time of battle under stresses greater than those of civil life and are peculiarly dangerous to the individual and the army.

5. Many with inherited or acquired predisposition break down in military life who have been and probably would be successful in their original spheres of life.

6. Military laws produce more offences than do civil laws among the feeble-minded and the psychopaths.

There is unanimity among nations as to the means of remedying the difficulties growing out of these problems.

"JUVENILE PARESIS." CLINICAL AND ANATOMICAL REPORT OF A CASE. Harry W. Miller, M. D., Washington, D. C., and Nicholas Achucarro, M. D., Washington, D. C.

The case is that of an illegitimate boy, the only living product of an alcoholic and syphilitic father, and a mother who acquired syphilis five years before the birth of the patient, and developed paresis about the same time as the patient.

Normal until October, 1908, when first symptoms were noted. Patient at that time was 11 years of age. Progressive mental failure of the type of simple dementia; characteristic physical symptoms. Positive Wasserman reaction in both mother and child. Report of the examination of the cerebral spinal fluid in both. Death December 20, 1909. Clinical report by Dr. Miller; anatomical and histological report in the case of both mother and child by Dr. Achucarro.

"A REPORT OF TWO CASES OF PELLAGRA." M. L. Perry, M. D., Parsons, Kansas.

First authentic cases reported from Kansas. Patients had been in state institutions for a number of years. Hospital dietary does not contain an excessive amount of corn products. Some unusual symptoms presented.

"SOME SUGGESTIONS ON THE PSYCHOLOGY OF SUPERSTITION," is the subject of Dr. J. B. Dresslar's address before the Medico Psychological Association, May 5th.

"CERTAIN DISTURBANCES OF THOUGHT." J. M. Keniston, M. D., Middletown, Conn.

In normal people only a small part of the myriads of impressions surging upon them are really registered and

assimilated. The average vocabulary in daily use is small. Much of our thought is automatic. Difficulty in ascertaining the content of thought, especially in insane. Until recently little has been written, even in narration of cases, about the disintegration of ideation. This paper *records* certain anomalies of thought, especially neologisms, verbigeration, and desultoriness, coming under the writer's own observation, as a contribution, and not an explanation.

"PROGRESSIVE MYASTHENIA WITH THE PATHOLOGY OF THE SPINAL CORD IN OLD AGE." Arthur S. Hamilton, M. D., Minneapolis, Minn.

A progressive myasthenia in old people associated with a pathologic condition of the spinal cord has been more or less generally recognized for many years. Von Leyden, however, first pointed out the definite relationship which exists between this progressive muscular weakness and a sclerosis of the cord, especially of the posterior and lateral columns. The present paper based on a study of the spinal cords of fifty-four individuals who died when seventy or more years of age with no evidence, either clinical or pathological, of gross lesion in the brain. Gross changes in the pia and arachnoid were rather uncommon. Marchi preparations showed fine black granules generally in the cord substance and in the meninges. In addition, in a certain number of instances, large black granules were found in the dorsal, lateral and ventral regions. A dorsal and lateral sclerosis was almost universal in Weigert preparations. Rarely the ventral columns were also involved. There was an increase of neuroglia, diffuse in some instances and localized in others. Pigmentation and atrophy of nerve cells and an increase of cells about the central canal and of corpora amylacea was also found. Evidences of marked arteriosclerosis were not common.

"A CLINICAL-ANATOMICAL CLASSIFICATION OF THE SENILE AND ARTERIOSCLEROTIC DISORDERS." LANTERN DEMONSTRATION. Charles I. Lambert, M. D., New York, N. Y.

Simple Senile Dementia distinguished from the cerebral arteriosclerotic disorders. Histological features discussed.

The Cerebral Arteriosclerotic Disorders may be classified with reference to the vessel or system of vessels involved, the neurological and psychological complex resulting, depending upon the principles of cerebral localization. These disorders may be classified as follows: Those of the inferior and superior cerebellar arteries, of the posterior, middle and anterior cerebral arteries, of the medullary and cortical terminal branches, each system and brain area affected producing a fairly demonstrable clinical complex.

"THE PROGNOSIS IN PARANOIA." Graeme M. Hammond, M. D., New York, N. Y.

Paranoia is generally regarded as hopelessly incurable. The writer desires to state his experience in the treatment of a case by continuous suggestion, and by putting the patient in the best bodily condition of health. This form of treatment has been carried out for the past six months with a gradual regression of the patient's delusory state.

"MENINGITIS: NOTES IN ITS RELATIONS TO INFECTIONS ELSEWHERE AND ITS HISTOLOGICAL FEATURES." Glanville Y. Rusk, M. D., New York, N. Y.

The frequency of meningitis, excluding syphilitic and meta-syphilitic forms. Its relation to infections in other organs. The histological features in purulent tubercular and blastomycotic meningitis, and of focal meningitis associated with acute disseminated abscesses in the brain.

"EXPERIENCE IN RE-EDUCATION OF DEMENTED PATIENTS." Richard H. Hutchings, M. D., Ogdensburg, N. Y.

"A REVIEW OF FOUR CASES OF JUVENILE PARESIS." Horace G. Ripley, M. D., and Charles G. McGaffin, M. D., Taunton, Mass.

During the past twelve years there have been admitted to the Taunton State Hospital four cases diagnosed as Juvenile Paresis, two males and two females. Two came to autopsy. This paper covers etiology, age at onset, duration of the disease, physical and clinical symptoms and anatomical diagnosis—general conclusions with a review of the literature.

"TYPHOID FEVER IN STATE HOSPITALS." Frederick S. Hammond, M. D., Trenton, N. J.

Typhoid in state hospitals presents certain phases which are due peculiarly to the environment. The conditions are in many ways favorable to the spread of the disease, but at the same time the power of control is greater than in general communities. The most important factors in institutional typhoid are the contagiousness of the disease and dangers of contact infection. The question of infection by water food is of secondary importance as compared to spread by contact, which is directly under control of the hospital management. Early diagnosis and rigid isolation are the means of prevention. Bacillus carriers must always be considered. Illustrative instances as furnished by typhoid fever at Trenton; water born epidemic; bacillus carriers; sporadic cases and means of preventing spread. Control of epidemics.

"THE IMPORTANCE OF COMPLETE RECORDS OF THE INSANE, AND A FEW REMARKS, CONCERNING CHIEFLY THE PRELIMINARY EXAMINATION." W. W. Hawke, M. D., Philadelphia, Pa.

NOTE.—If there is not sufficient time for the reading of these papers in toto they may be read by Title.

Authors of papers are requested to provide copies for the use of the Secretary in the preparation of the Transactions. By doing so, much delay may be avoided and the Transactions will be in the hands of the members at a comparatively early date after the meeting at which the papers are read.

HYSTERIA THE RESULT OF PSYCHIC TRAUMA.—The fundamental or predisposing cause of hysteria, suggestibility, no doubt constitutes an etiological factor common to both the social and the individual forms; yet the direct environmental infringements or psychicentanglements which may favor the development of one or the other, are not the same. The social forms reveal for us the victims of the hysterical diathesis. It takes some accident bearing a peculiar relation to the individual himself to reveal the true hysterical. Without much fear of contradiction, the affirmation may be ventured that hysteria is usually the result of

some psychic trauma; upon some mental shock coming perhaps during a period of brain fatigue, or at that age when the physical development being most active, the vital forces, as it were, too busy in quarters other than psychical, we must place the blame. For this reason it is often only an accident that determines the development of dementia præcox in one individual and hysteria in another. They are both essentially diseases of the developmental, the evolutionary period (fourteen to twenty-one), when the organism is emerging from the more or less stable equilibrium of youth to a definite state of maturity. They both frequently seem to rest upon a defective nervous endowment, some constitutional inferiority, an improper education, and a lack of character training. The mental shock, added to the defective mental endowment, results in a sort of psychic entanglement; the lines of psychological association become raveled, trammelled up, snared and labyrinthed, and often it is a task of great difficulty to trace the associational chain to the point of trouble, bring the knot to the surface and untangle it. In addition to an ordinary mental shock, many times an idea acquired by the patient that he has suffered some real injury, is necessary for the development of a hysteria. Whether the individual does suffer such an injury or not, has nothing to do with the case. In fact, where a real injury has been suffered, there is less room left for development of a hysteria. The psychic injury may fracture a personality, just as a real injury may fracture a bone. Janet tells of a man who was knocked down in the street, and, while he was not run over, a heavy wagon was almost upon him, and in his confusion he thought it had actually passed over his legs. As a consequence, both legs were totally anesthetic. In another instance a man attempted to climb from the steps of one railroad coach to another. He suddenly saw the train approaching a narrow tunnel. He was not struck, but for the instant he thought he was about to be. He drew himself inside the coach and found that he had a complete hemiplegia of the exposed side of the body. A patient of my own was bitten on the thigh by a dog. The wound resulting was scarcely more than a scratch, yet he suffered from a

total psychic paralysis of the limb for several hours, and it was three days before I could re-establish completely in his mind the idea that he could use the leg freely.

These considerations have an important bearing upon many damage suits. No situations more liable to produce, if not a real injury, the vivid idea of injury—*i. e.*, a psychic trauma—than railroad or street car accidents, can well be imagined. Such psychic injuries may last for a long time after the physical injury—even if one has been suffered—has disappeared. There may be good grounds for the recovery of damages, even when it cannot be determined that any physical injury whatever has been suffered. Putting to one side all questions of conscious simulation, such hysterical states are more likely to become fixed and chronic the more the litigation is prolonged, and no doubt of the plaintiff's sincerity is implied when it is said that a settlement of the case at court usually ends his symptoms.—*Ralph Reed, in Lancet-Clinic.* .

DEFINITION OF ALCOHOLIC INSANITY.—There are certain persons who, having taken alcohol to excess, develop a form of insanity characterized by distinctive features, clinical and pathological. (This is the form which I mean by "alcoholic insanity.")

There is a far larger number of persons in whom various forms of insanity are associated with drinking habits; but these forms present no characteristic features either clinically or histologically, and unless the fact of indulgence in alcohol can be established by inquiries into the personal history of the patient, it would be impossible from a study of the case alone, in my opinion, to adduce alcohol as the causative factor.

It is this larger class which I am unable to look upon as of alcoholic origin in the sense that alcohol was the causative factor.

What are the distinctive symptoms in a case of alcoholic insanity?

In my opinion it is only when a case presents the symptoms described by Korsakow as polyneuritic psychosis that

we are justified in asserting that we are dealing with a case of alcoholic insanity. I know that it is generally asserted that Korsakow's disease is only one of the forms by which alcohol displays its deleterious action on the nervous system, and further that Korsakow's disease is not necessarily the result of alcohol.

As regards the first of these points, if it be allowed that alcohol is capable of producing a definite form of insanity, a form which can be diagnosed without a reference to past habits, and which can be recognized after death by characteristic appearances, then in default of these criteria the burden of proving that alcohol may also cause various forms of insanity, which we frequently meet with in persons in whom one can with certainty exclude this factor, rests with those that make the assertion.

As regards the second, my experience fully bears out Ascherson's (1) statements that "hard drinking has a share in the ætiology of Korsakow's disease in an overwhelming majority of the cases," and "a more careful investigation of the histories of the non-alcoholic cases would only serve to swell the number of the alcoholic at their expense. In typical cases alcohol can never be excluded."

I can recall one case of polyneuritic psychosis in a young woman suffering from pulmonary tuberculosis, apparently, from her own account, a model of propriety and sobriety, and with none of the physiognomical stigmata of alcohol, and unless I had been fortunate enough to obtain from a trustworthy source the true state of affairs, which was a life of drunkenness and immorality, this would have been included under the head of polyneuritic psychosis of non-alcoholic origin, and probably as due to tubercle.

Alcoholic Insanity (Korsakow's Polyneuritic Psychosis): Its Symptomatology and Pathology. By John Turner, M. B., Senior Assistant Medical Officer, Essex County Asylum, England.—*Jour. Ment. Scien.*, Jan., 1910.

A DISCUSSION OF MENTAL TROUBLES IN THE ARMY FROM THE MEDICO-LEGAL AND CLINICAL VIEW. (By Dr. M. Grau-

jux and Dr. M. A. J. Rayneau. *Review Neurologique*, August, 1909.)

Dr. Graujux sums up his observations of mental diseases in the army from the practical standpoint, as follows:

Insanity in the army finds admittance in two ways: First, from the impossibility hitherto encountered of establishing an effectual psychiatric examination at the hands of the reviewing board; and, second, from the acceptance of volunteers recruited principally from psychics. In view of these two facts, a demand should be made that the official instruction published each year for the meeting of the reviewing board should compel the government authorities to acquaint the board with the names of those conscripts who have even voluntarily ever been inmates of asylums, and to point out those individuals who have been notably unbalanced, and these statements should be furnished in time for the necessary inquiries before the meeting of the board.

The general certificate given to the discharged of "Absent for good cause" should be denied when the discharge is caused by mental troubles. Every volunteer should be obliged to furnish a medical certificate, preferably from his family physician, stating that he shows no characteristic cerebral troubles, and finally there should be a psychiatric examination of every volunteer by the physician of the recruiting bureau.

Further, considering that in the disciplinary corps, mental troubles cause from three to six times more discharges than in the rest of the army, and that these soldiers are not examined for mental defects, there should be demanded, in addition to the papers of every individual presented to the disciplinary board, a medico-legal certificate furnished by the corps physician, besides a physical examination of such candidates for the disciplinary corps made by a commission composed of alienists and corps physicians, before such candidates have finished the time required prior to their appearance before the disciplinary board.

Again, realizing that in the military penal establishments the insane are three times more common than in the army, so that the judges are uncertain whether the offenses

were due to mental abnormalities or not, every man appearing before the court-martial should undergo a medico-legal examination, and a course of psychiatry should be offered in all military schools.

The data of the most recent wars shows that various psychoses are much more numerous in campaigns than in peace, and that the dangers arising from this contingency require in the European armies provision for psychic troubles arising in the field. The experience in the Russo-Japanese war along this line calls for hospitals at the front, hospitals along the line of march for psychic patients as well as hospitals for the non-transportable. These conditions in the field need the intelligent supervision of men versed in psychic troubles as well as trained in military affairs. As long as in the armies of Russia, Germany, Austria, Hungary, Italy, attempts have been made to increase a knowledge of psychiatry and to encourage specialization among army doctors, so that there shall be at least one alienist in each army corps, while in France, military students in some of the schools have been receiving instructions in mental diseases and have chosen to specialize in this line by service in the asylums, it is not too much to demand that organized courses in psychiatry should be encouraged in all military schools, and that all army doctors showing a taste for this work should be accorded all facilities for pursuing it in hospitals and clinics.

In short, to deal with mental diseases in the army, there must be provided the presence of a trained specialist in each army corps in military stations in times of peace, or in the field in times of war.

Dr. Rayneau believes that there is an incompatibility between the psychic state of certain individuals and the demands of military life. Besides this incompatibility there are other causes of mental troubles among soldiers,—fatigue, sun stroke, alcoholism, syphilis, infectious diseases of warm countries, auto-intoxication and accidents, but predisposition is the chief factor.

Nevertheless offenders against the common rights or military regulations are the feeble-minded, the nervously unstable, epileptics, the hysterical or general paralytics.

Desertion, especially, is often a pathologic "prank," and therefore a study of such pranks is of the utmost importance in military legal medicine.

Two psychopathic conditions prevailing among soldiers are degeneracy in all its forms and dementia præcox. The most prevalent mental trouble in the career of officer and soldiers is, by far, general paralysis. A number of cases are due to traumatism, although traumatic general paralysis is very rare.

Psychoses of exhaustion have been noted in armies in the field. Accidental neurasthenics may derive great benefit from army life, although this life is bad for those cases due to degeneracy. Self mutilators should be regarded as mentally abnormal. Stricter laws should be enforced to compel a medical examination of all volunteers, for it is in this way particularly that insanity finds its way into the army. No one should be received as a recruit who does not offer a certificate of mental health from the mayor of his town, and a medical certificate certifying to his sane mind, to which should be added an examination by the military authorities of his antecedents and heredity.

As some abnormalities could be discovered only after a term of service, it is necessary that the officers should possess some general knowledge of psychic disease.

Every man appearing before the council of discipline or a court-martial should be subjected to an expert medical examination. Each army corps should have an expert alienist, whose service would be at the command of such boards and of the prison authorities.—*Translated by C. E. Riggs, in St. Paul Medical Journal.*

AFTER-CARE OF THE INSANE.—"When a patient has recovered from his mental trouble and has been discharged from the hospital the treatment of his case must not be regarded as finished, for there is still to be dealt with *an extreme liability to recurrence*.

Of 425 consecutive cases admitted to the Kings Park State Hospital during the seven months from October, 1907, to April, 1908, 105 were cases of re-admission. That is to

say, that minute fraction of the population which consists of patients discharged from asylums has contributed very nearly half as many of our admissions as has the entire rest of the population of the hospital district.”—*J. Rogues de Fursae’s Manual of Psychiatry*.

PLACE AND METHOD OF SPINAL PUNCTURES.—A sterilized hollow needle, about four and a half inches long, is introduced straight, without any vertical or lateral inclination, into the space between the laminæ of the fourth and fifth lumbar vertebræ; if more convenient, the space above or the one below the one indicated may be selected. The usual guide for the intervertebral space is the level of the iliac crests. The point at which the needle should be introduced is a trifle below and a quarter of an inch to one side of the tip of the vertebral spine. Extending from the level of the upper border of the second lumbar vertebra to that of the sacrum is a large meningeal reservoir which is easily reached in the manner described above. In this reservoir are contained the fibres of the cauda equina which are in no danger of being injured by the point of the needle.

If the needle strikes bone no attempt should be made to alter its direction by partly withdrawing it and inclining it one way or another, as it soon becomes filled with blood and the cerebro-spinal fluid, if thus obtained, will be contaminated. The needle must be withdrawn, cleansed of all blood, and re-introduced at another point. It is best, perhaps, to have two or three needles at hand whenever lumbar puncture is undertaken.

As soon as the point of the needle has entered the meningeal reservoir cerebro-spinal fluid begins to escape from its outer opening either in drops or in a stream, depending upon the degree of intracranial and intraspinal pressure.—*J. Rogues de Fursae’s Manual of Psychiatry*.

DEMENTIA PRAECOX.—A subject previously affectionate, active, intelligent, even brilliant, becomes indifferent, indolent, and distracted. He is weary of everything, of play as well as of work. He ceases to acquire new ideas, or to

co-ordinate those which he has acquired previously, so that his general stock of ideas becomes more and more limited.

Nervous symptoms (headache, insomnia, hysteriform disturbances) or constitutional symptoms (anorexia, loss of flesh) are frequent.

In the mild forms the disease is often unrecognized. The symptoms of intellectual enfeeblement pass for "negligence" or "lack of ambition." Such cases occur much more frequently than is commonly believed.

The following lines from a letter addressed by a principal of a school to the parents of one of his pupils are very significant from this point of view.

"As you can see, the marks of M. L. are no better than those for the preceding term, far from it. This pupil pays no attention to his duties, which three-fourths of the time are left unfinished; he no longer takes the trouble of learning his lessons. In the class room and at his studies he spends most of his time dreaming. It is evident that he cares nothing for his work. His professors no longer recognize in him the former studious pupil. It seems that even the approaching examinations do not affect his indifference. When it is pointed out to him that he is likely to fail, he promises vaguely to be more diligent, but one can see that he has no firm determination. The comments and suggestions in the letters of his parents no longer have any effect on him. . . . Formerly so jolly and so full of good humor, he has become quite unsociable. He does not seem to be pleased except when alone. When, by way of exception, he joins his comrades in conversation or in play, he soon leaves them, often after quarrelling with them over some absurd trifle. . . . Lately he has been complaining of insomnia and headache. We have had the physician see him, but he has found nothing serious and has merely prescribed rest."—*J. Rogues de Fursae's Manual of Psychiatry*.

INVESTIGATION OF THE MENTAL STATE.—We may precede our personal examination by noting *facts communicated by others*, respecting the *onset of the evidences of disease*. The date and character of any *important changes* in conduct, speech, etc. The supposed cause of such changes.

Following this, under "facts observed by the examiner."

The *consciousness* of the patient is a fundamental matter. It may be clear, clouded or confused. Stupor, active excitement or delirium may be present and render the patient "inaccessible" to systematic mental examination.

Consciousness of environment implies possession of sensation, perception, memory, association, ideation and judgment in varying degree.

Sensation plus its resultant, (reflex) motion gives rise to *emotions*, commonly designated as "states of feeling;" pleasure, joy, anger, sorrow, love, hate, etc.

The *emotional tone* is elated in mania—perhaps mildly—when a state of "euphoria" or simple "feeling good" is said to exist. Hilarity, exaltation, rage, are more pronounced emotional states.

It is depressed in melancholia, often to an extreme degree, so that variations from simple "sadness" to profound despair and hopelessness color the picture.

It is neither elated nor depressed as a rule in the dementias, if at all advanced; and is often absent from the earliest stage of the acute primary dementias (D. præcox). A state of emotional indifference characterizes most of these patients. While the emotional states of mind have not the "dignity" in a psychologic sense, of the "intellectual" processes proper, yet they strongly influence "conduct" and are of great importance to the physician who must always remember that *every melancholiac is a potential suicide*.

Sensation may be normal, hyperacute, or blunted. Large or small areas of the body may be affected.

The fact should be recognized that many insane persons present marked examples of "segmental anesthesia"—commonly supposed to be limited to "Hysteria."

Stoddart has directed special attention to these sensory disorders, and gives excellent illustrations of them.

The distribution of these anesthetics points conclusively to their central (cortical) origin.

Errors in perception may give rise to illusions (false perception of real sensations) as when a chair is seen as an

animal, or a bell is heard as a voice.—*Abstract from Diagnosis of Insanity, Langdon.*

NEURODIAGNOSIS.

THE VISION OF GENERAL PARALYTICS.—Some conclusions of importance on this subject have been published in the *Recueil d'Ophthalmologie* by Rodiet and Pansier. Contraction of the visual fields is often an early symptom in general paralysis of the insane, and may be only for certain colors; it may also be irregular, and the colors for which the field is contracted may be from any part of the spectrum. Optic atrophy is rare: as a rule no ophthalmoscopic changes can be seen which would account for the symptoms. This well-known fact is one of the mysterious distinctions between general paralysis and tabes dorsalis which no one has yet satisfactorily explained. Scotomata, when found, are usually traceable to some other factor, not to the general paralysis. Thus alcoholism, syphilis, lead-poisoning were found by the authors in their various patients. Optic atrophy occurs in 5 per cent. or slightly more of general paralytics, but frequently some cause, such as those just mentioned, exists which might underlie it. Visual troubles in these patients are not common, and progress but slowly. Lesions of the fundus when discovered in those with visual disturbance are variable and scarcely characteristic. Optic atrophy, when present, generally appears when the disease is established and can be seen to evolve from the neuritic stage to that of atrophy.—*The Hospital.*

A SYMPTOM IN DIAGNOSIS OF TRUE SCIATICA.—Gara (Il Policlinico, an. xiv., fasc. 22, p. 694) says that in cases of primary sciatica there is a tenderness found localized over the spinous process of the last lumbar vertebra. He has diagnosed differentially a carcinoma in a case in which sciatic pains coexisted with tenderness over several vertebra; and in a case of fracture of the neck of the femur with pain in the

region of the sciatic nerve, the absence of tenderness as described gave a valuable indication. Schlessinger adds 4 cases to those of Gara.—*Med. Times.*

CONJUNCTIVAL EARLY DETECTION OF ARTERIOSCLEROSIS.—At the February meeting of the Medical Society of the City Hospital Alumnæ, Dr. W. H. Luedde while demonstrating the circulation in the human conjunctiva with the binocular microscope called attention to its use in detecting the earliest changes in arteriosclerosis and the variation in the velocity of the blood current.

ELECTRIC TEST FOR TRAUMATIC NEUROSIS.—Dr. Larat gives the tracings in seven cases of traumatic neuroses to show the peculiar electromuscular contractions which seem to be specific for traumatic nervous diseases and are not observed in any others. The response to galvanism is increased, the anodic closure contraction equaling or surpassing the cathodic closure contraction. In health the latter surpasses the former by two-thirds. The peaks in the tracings are not rounded as in the reaction of degeneration, but are sharp and angular as with normal contractions. The increased excitability is observed both on the affected and the sound side. These findings confirm the assumption that a traumatic neurosis is a general neuropathic disturbance of the nerve centers, not a local affection.—*Presse Medicale.*

THE STATE OF THE PUPILS IN COMA.—During normal sleep the pupils are contracted though not to the fullest extent. They are motionless and unless the subject awakes up no change can take place. The pupils moreover are equal.

Certain lesions of the irido-motor system, says Dr. Lafon, influence this pupillary contraction. It is abolished in cases of paralysis of the sensory-motor reflex centre (3rd pair). It is interfered with by stimulation of the centrifugal path of the sensory arc (great sympathetic) and, lastly, it is diminished or abolished by paralytic lesions of the peripheral system (ganglion and ciliary nerves) the action of mydriatics, glaucomatous dilatation, etc.

To make matters clear Dr. Lafon gives the name *cathypnic contraction* to this contraction of the pupils during sleep.

All morbid states that entail paralysis of the cortical functions provoke pupillary contraction similar both clinically and causatively to cathypnic contraction. "The extinction of hemispherical sensation plunges the brain of the sick person into obscurity and just as in deep sleep the pupils are markedly contracted." (Venneman.)

Among the various causes of abolition of the cortical functions coma occupies a foremost place. After a period of progressive torpor of uncertain duration during which the pupils gradually contract and lose their reactions, coma supervenes. Consciousness, sensation and voluntary movement disappear and only the vegetative functions are retained and, like the other sphincters of the body, the pupils close. Whatever be the cause of the coma this pupillary contraction takes place and if we exclude pre-existing lesions of the nervous system mentioned above, this general rule admits of only one exception, viz.: in poisoning by the solanaceae the pupils are dilated to a maximum. This mydriasis is not of central origin but is due to the direct action of atropine on the pupils.

When the case is going to have a fatal termination the coma deepens, the vegetative functions become paralyzed in turn and like the other sphincters the pupils relax. This is the dilatation *in articulo mortis* and is constant.

Apoplexy only differs from coma in the suddenness of its onset. In Cheyne Stokes' respiration the pupils afford a trustworthy indication of the state of the cortex. During the periods of apnoea, when the patient is comatose, the pupils are contracted and motionless. During the periods of polypnoea on the contrary the pupils dilate and once again react.

It is now held that this respiratory rhythm corresponds to alternations of excitement and depression of the cerebral cortex so that the respiratory and pupillary troubles have a common origin.

In the other forms of abolition of the cerebral functions: syncope, epilepsy, hysteria, etc. we also meet with fixed

dilatation of the pupils as long as the total paralysis of the cortex persists.

The same holds good in general anaesthesia. After a period of complete narcosis progressive dilatation with restoration of the reflexes shows that the cortical functions are returning, *i. e.* awakening. Rapid dilatation on the other hand without any return of the reflexes is a sign that the vegetative functions are being lost, it is dilatation *in articulo mortis* and death is imminent.—*Le Monde Medical*.

ALBUMINOUS AND NON-ALBUMINOUS SPUTA.—It is not often that sputum is tested chemically, but there is evidence to show that, in addition to what can be learned from microscopical tests, some useful information is afforded by chemical examination, especially by determinations of whether the sputum contains albumen or not.

The investigation is not much more difficult than it is in the case of urine. If the sputum is abundant, especially in cases of bronchiectasis, it may be possible to obtain clear fluid from it directly. In other cases a small quantity of sputum may be put into a little normal saline solution and either shaken or well stirred after the addition of acetic acid to coagulate the mucin, the mixture being then filtered and the filtrate tested for albumen in the ordinary way.

One of the main points that have been ascertained is that tuberculous sputum almost always contains albumen, even when no tubercle bacilli can be found. It seems that the absence of any pronounced quantity of albumen from the sputum of a doubtful lung case is a decidedly favourable sign. The converse is not true, for phthisis is by no means the only lesion of the lung that renders the sputum albuminous.

The cases of bronchitis associated with heart disease fall into two groups in this respect—those with actual inflammation of the bronchial tubes and non-albuminous sputum, and those with no true bronchitis, but rather a passive exudate and albuminous sputum. It would be interesting to investigate this point further to see whether there is any difference in the prognosis in the two groups.

When patients suffering from acute or chronic nephritis develop a cough which is regarded as bronchitic the sputum usually contains albumen, the reverse of what is the case in simple bronchitis. Of acute conditions, it may be noted that both lobar and broncho-pneumonia give rise to albuminous sputum.—*The Hospital, Editorial.*

The Alienist and Neurologist would be greatly indebted for an explanation of the neurological and metabolic relations of this phenomenon.

NEURO SURGERY.

SURGERY IN NEURASTHENICS. Sensible Suggestions.—Stuart McGuire, Richmond, Va., (*Journal A. M. A.*, March 26), emphasizes the importance of refusing to operate on a neurasthenic patient unless the symptoms are clearly due to organic disease, and also the necessity, if an operation is undertaken, with either latent or developed neurasthenia, of protecting the nervous system from psychic and physical shock. This will require not only proper preliminary preparation but also careful and often long postoperative and posthospital treatment. The surgeon must remember that his aim is to cure, not merely to cut, and if neuroses exist he must remember that if they exist alone, operation will be liable to do harm, while if they exist with organic disease, operation may do good but great care must be taken not to aggravate the nervous symptoms. This is especially true of patients who have previously been subjects of other operations. Two separate preliminary examinations should be made of every surgical patient; the first for diagnosis to determine the condition to be corrected, the second for prognosis to determine the safety of the operation and the chances of a complete cure. Several specialists may be required to aid in this, as surgeons are not always qualified to do all the special work that is required. The preparation of the patient should be both physical and psychic and in the past too much attention has been paid to the first and not enough to

the second. Not all patients are in good nervous and physical condition and we are too apt to underrate the important effects, psychic and otherwise, of local operations on the patient's health. Hence a longer stay in the hospital should be insisted on in many cases and when patients return to their homes they should be placed under the oversight of their family physician rather than left with simple verbal or written instructions to be carried out by themselves. McGuire thinks that, with the rapidly increasing amount of surgery being done, there should be an educational movement started for the study of the many peculiar factors involved. Physicians should take part in this and the subjects should include the question of a proper dietary, best method of bowel regulation, and treatment of bladder irritation, the hours of sleep, the amount of exercise permissible, and hundreds of other questions relating to occupations, habits, bodily hygiene, etc. When surgeons, he says, appreciate the influence of neurasthenia on the result of an operation, and when the family physician is educated in the details of posthospital treatment and given legitimate work with proper compensation, then and not till then will there be harmony in the profession and the greatest good accomplished to the greater number of patients. *The American Practitioner and News* wisely abstracts this for its many intelligent readers, adding much to the otherwise valuable contents of the April number.

NEUROTOXEMIA.

HABITINA AND OTHER MAIL-ORDER DRUG CURES.—One of the vicious mail-order drug "cures" which flood the market is discussed in this issue. Free samples of this particular "cure" may be had for the asking, each sample containing enough morphin sulphate and heroin hydrochlorid to kill seven or eight healthy adults. Before the national Food and Drugs Act was passed this dangerous mixture could be sent through the mails with nothing on the label to show its tremendous potentialities for harm; now, fortunately, the

label has to declare the amount of heroin and morphin the product contains. This is a splendid advance so far as it goes, but it does not go far enough. Most of the state laws recognize the principle that the public should be protected against itself; hence we find statutes forbidding the sale of dangerous drugs by pharmacists to laymen, except under certain restrictions. There is no law, however, which can be invoked against the ghouls who, for the sake of the dollar, take advantage of the impotency of the present postal regulations to sell that which will debauch and destroy their helpless victims. There is something radically wrong when irresponsible and conscienceless men, without even the pretense of scientific training or ability, should be able to use the United States mails and the express companies to scatter broadcast potent drugs of the most dangerous type. That it should be possible for the ignorant or the criminal to obtain without let or hindrance morphin and heroin in quantities limited only by the ability to pay for them, is a disgrace to a civilized country and a serious menace to public health.—*Jour. A. M. A.*

EPILEPSY CAUSED BY ALCOHOL.—A large group of convulsive seizures, allied to epilepsy, are due to a toxic agent, as in lead poisoning or uremia. Severe epileptic convulsions also occur in steady drinkers. Kovalefsky, a Russian physician, shows that wine drinking may produce epilepsy. He says: "Caucasus is a country of grape and wine making. The drinking water from the mountain rivers is bad, but the wine is good. The natives of Caucasus quench their thirst not with water but with wine, and the wine is no light one. It contains from five to fifteen per cent. of alcohol. Wine drinking is so common that no one considers it inebriety. Everybody knows what a high percentage of epilepsy is caused by the abuse of alcoholic beverages. I have spent the summers during the last fifteen years in Caucasus, where I have a medical practice, drawn from a large district, and in no other place have I had so large a proportion of epileptics among my patients." In epileptics, the post-epileptic symptoms are of importance. The patient may be in a trance-

like state, in which he performs actions of which subsequently he has no recollection. Attacks of mania may occur, and the epileptic patient may be dangerous or even homicidal. It is held by good authorities that an outbreak of mania may be substituted for the fit. Should an epileptic, in an attack of mania, wound or kill some person, he is considered to be irresponsible, according to a verdict given after a trial for murder, held recently at London, Ont.—*Canadian Journal of Medicine and Surgery*.

NEUROTHERAPY.

EPILEPSY.—TREATMENT.—Exploratory trephining advised in all cases of epilepsy of traumatic origin. Eleven cases operated, four of idiopathic and seven of surgical epilepsy. Cysts found in two instances, cicatrices in four, and œdema of pia in all. Improvement resulted in all the cases from removal of œdematous fluid. Epileptic attacks returned in four cases.—*Tilmann, in Monthly Cyc. and Med. Bull.* P. 127.

COFFEE AS AN ANAPHRODISIAC.—Coffee is known to have an anaphrodisiac action. This has been known for a long time by the Orientals, and was confirmed by Louis XIV. by observations upon himself. The Princess Palatine wrote that coffee makes people chaste and was the drink, above all, indicated for Catholic priests. The frigidity of Frederic II. and Fontelle was attributed to their abuse of coffee. Linne called the infusion of coffee “*potus caponum*,” and Trousseau declared that there is no more potent anaphrodisiac known. Boussingault held the same opinion. Boucard cites the case of a young man of twenty years of age who for three or four years had been drinking coffee in large amounts and had atrophied testicles and was impotent. Guelliot reported several analogous cases. Certain cases of prostatitis were also attributed to the abuse of coffee.—*Prof. A. Gouget, Paris. Excerpt by Medical Council.*

THE VERTEBRAL REFLEXES IN SPONDYLOTHERAPY.—

“In medical literature the author has referred repeatedly to certain Visceral Reflexes elicited by cutaneous irritation, viz., the lung reflexes of dilatation and contraction, the heart reflex, liver reflex, stomach reflex, intestinal reflexes, and the aortic reflexes.

The reflexes in question are endowed with more than mere physiologic interest. They yield unequivocal demonstration of the fact that the sensory peripheral nerve terminations receive impressions which are conducted, communicated or reflected by aid of the nervous system.

Such impressions react on the viscera and the manifestations of the reaction may be utilized in a diagnostic and therapeutic direction.

The evidence heretofore adduced in explanation of the results achieved by electric, hydriatic, mechanic and balneary treatment of disease was naught else than a mere array of words conceived only in conjecture.

The cutaneous visceral reflexes referred to suggest the rationale of the different peripheral methods of treatment.

Visceral reflexes may be evoked not only by cutaneous irritation but likewise by concussion and the application of the sinusoidal current to the spinous processes of the vertebrae.”
—Winslow Anderson, *Review Abstract of Albert Abram's new book 'Spondylotherapy*.

NARCOTICS RETARD PHAGOCYTOSIS.—Reynolds, from experiments. concludes that morphine checks diapedesis and diminished phagocytosis. Morphine temporarily paralyzes the activity of the phagocytes and the bacteria multiply.

NARCOSIS AND LECITHIN.—At present the most generally accepted theory concerning the action of narcotics is that they are taken up by the lipoid substances of the brain, with which they form a solution. If the blood be examined during narcosis, it will be found that there is a considerable increase in fat, which is probably Nature's method of keeping the poison away from the vital organs. Dr. S. Nerking has tried to paralyze the toxic action of the narcotic by means of intravenous injections of lecithin. Rabbits can be narcotized

easily by means of intravenous injections of urethane, but if the same amount is injected with a one-per-cent. lecithin emulsion the urethane will lose its action, as it combines with the lecithin, and thus will not reach the lipoids of the brain. The same results were obtained with ether, chloroform, morphine, morphine-scopolamine, chloral hydrate, novocaine and stovaine in dogs, rabbits and rats. The lecithin shortens the anæsthesia and diminishes the after-effects, hence it is recommended that it also be tried on man.—*Muench. med. Woch.*

BROMINE IN COMBINATION WITH ALBUMEN. The New Organic Bromine Product, Bromalbin, has Certain Advantages Over the Alkaline Bromides.

Bromalbin is the result of long experimentation to obtain a satisfactory substitute for the inorganic bromides. It is an organic compound—one in which the element bromine is chemically combined with albumen. *Bromalbin* occurs in the form of a light yellow powder which is odorless and practically tasteless; is insoluble in water, alcohol, acids, and the ordinary solvents, but is slowly soluble in alkaline solutions. It contains approximately 15 per cent of bromine. It is true that potassium bromide contains more bromine (about 67 per cent), but the physiologic activity of the inorganic and organic preparations is apparently not in proportion to the bromine contained. Just why this is so we cannot say, but the reason probably lies in the difference in the chemical structure of the two bromine carriers.

Bromalbin passes through the stomach practically unchanged and gradually dissolves in the alkaline intestinal secretions; it is therefore slowly absorbed without producing the exaggerated effect which follows the more rapid absorption of the alkaline bromides, but the medicinal effect seems to be none the less sure. *Bromalbin* is also more completely absorbed than the inorganic bromides, the dose of which, instead of being dissociated into its elements and absorbed, may pass off in large part with the feces; and much of that portion which enters into the circulation is quickly eliminated by the kidneys. Tests which we have carried on in our de-

partment of experimental research show that Bromalbin is non-toxic, and when administered in large doses no symptoms of bromism have been evoked.

We have had encouraging reports concerning *Bromalbin* in the treatment of epilepsy and there is reason to suppose that it will prove equally efficient in hysteria, neurasthenia, reflex headache, insomnia, neuralgia, migraine, delirium tremens, tinnitus aurium, and other nervous affections.—*P. D. & Co., Therapeutic Notes.*

SPINAL ANAESTHESIA FATALITY.—*The Indian Medical Gazette*, Major Gabbett, describes an interesting case in which death followed the insertion through the eleventh dorsal interspace of one milligramme of strychnine hydrochloride with one decigramme of novocain. It is difficult to decide from the account whether the fatal issue arose from strychnine poisoning or from overdose of novocain; it seems at least certain that respiratory failure was the direct cause of it. The patient was a native, aged forty-one, who was to have a large elephantiasis of the scrotum removed, weighing 31 lbs. Five minutes after the spinal injection he had anæsthesia up to the nipples, and ten minutes later still it had reached three inches above that level. He sat up for one minute after receiving the dose, and then lay down with his head on a pillow. Half an hour after the injection, just before the completion of the operation, he had dyspnœa and tried to vomit, and shortly after ceased breathing. All efforts at resuscitation failed, and it is mentioned that stiffness of the arms somewhat impeded artificial respiration. There had been practically no loss of blood and no shock, and the author attributes the result to spasm from the action of the strychnine rather than to the action of the novocain. He concludes by resolving to leave pioneer work alone in future, and to stick to general anæsthesia until spinal methods are improved by others.—*The Hospital.*

TENDINOUS REFLEXES IN DIAGNOSIS.—According to Dr. Böttiger the definite significance of such absence may be determined by passing a triphasic alternating current

through the limbs for a short time. During and for some time after such stimulation the reflexes, both patellar and Achillean, will return if their absence is of a functional nature, but in cases of organic disease—tabes dorsalis and the like—excitation by the current has no effect. To apply the test, the patient is seated, the feet bared, and an electrode from a triphasic alternating current is applied to each foot, and the third electrode is grasped by the hands. The strength of the current is gradually increased, taking care to stop before there is dorsal flexion of the toes and fingers. The reflexes are then sought for in the usual way. Dr. Böttiger supposes that the electric current acts by increasing the muscular tone. He reports several cases in which the method has been of assistance in diagnosis. A railway employe was affected with double facial paralysis, with the Achillean reflexes markedly diminished. The railway doctors diagnosed syphilitic encephalitis, in spite of denials on the part of the patient, and he was dismissed without pension. Dr. Böttiger was able to show by means of his method that the diminution in the reflexes was functional, and that the facial paralysis was of a rheumatic nature.—*The Hospital*.

WHICH PREPARATION OF THE PITUITARY IS THE BEST TO USE IN TETANY?—The removal of the pituitary in part causes even in man an enlargement of the thyroid. Extirpation of the thyroid causes an increase in the size of the pituitary. We have shown in feline tetany that the pituitary gland given in distilled water subcutaneously had an effect at least equal to the calcium salts in alleviating the tetany after complete parathyroidectomy. As calcium has failed in several instances to cure tetany in man it is necessary to seek other agents to combat the disease.

Professor Pal, of Vienna, reports a case of severe tetany in a boy. He gave pituitrin and the tetany disappeared in twenty-four hours, whilst the other symptoms retrograded. We have made experiments with pituitrin in feline tetany and find it has some effect which is, however, quite fugitive. We then tried the infundibular extract (of Burroughs Wellcome and Company, 20 per cent.). It had a much more

prolonged action than pituitrin, even when we gave the latter in ounce doses subcutaneously. But neither pituitrin nor infundibular extract had the continued power that the whole gland exerts. We used all these preparations subcutaneously. As the boiled filtered infusion of the whole gland can not be readily used we would recommend as the next best preparation the 20 per cent. infundibular extract of Burroughs Wellcome and Company by intra-muscular injection, in doses of seven drops three times a day. It should not be used subcutaneously, as it might cause some necrosis of the skin by the vaso-constriction. As infundibular extract is not poisonous, it can be used oftener than three times a day if the conditions necessitate it.

Isaac Ott, M. D., and John C. Scott, M. D., Physiological Laboratory, Medico-Chirurgical College of Philadelphia, Philadelphia, in *Monthly Encyclopedia of Medicine and Surgery*.

BROMALBIN IN EPILEPSY.—The defects of the inorganic bromides for "epilepsy and other convulsive disorders. Bromalbin, an organic compound in which bromine is chemically combined with albumen, contains approximately 15 per cent. of bromine. It is an odorless and practically tasteless powder slowly soluble in alkaline solutions.

Bromalbin was evolved in the chemical laboratories of Parke, Davis & Co. and is offered to the medical profession in lieu. Reports are encouraging concerning its efficacy in epilepsy hysteria, neurasthenia, reflex headache, insomnia, migraine and other nervous affections.

The chief advantage of Bromalbin over the inorganic bromides appears to be in its adaptation to long-continued treatment. It is said to pass through the stomach practically unchanged, consequently does not produce the gastric irritation common to the alkaline bromides.

LOCAL ANALGIC EFFECT OF SOLUTIONS OF MAGNESIUM SULPHATE.—Dr. Solomon Solis Cohen, (J. A. M. A.) 1909. The effect was not a psychic phenomenon, for applications of other salts were made, but none gave the same results. The cases in which this apparently reflex analgesia was observed

were cases of aneurism, gastric ulcer, gastric carcinoma, lymphatic leukemia, acute pericarditis, sciatica, headache of unknown origin, chronic pleurisy. No local anesthesia was observed.

CALCIUM SALTS FOR EPILEPSY.—Calcium metabolism has been exciting a good deal of attention recently, and as Halford points out, the results of recent observations and experiments on the physiology of the female genital organs may well lead us to think that calcium metabolism will become a prominent feature in the physiology and pathology of the future. According to the *Lancet* of January 8, 1910, the discovery of the action of calcium salts in the treatment of epilepsy is due to the researches of a succession of Italian investigators. For example, Sabbatani found that soaking the cortex in a solution of calcium chloride diminishes its excitability, while such salts as sodium oxalate or citrate have an opposite effect, and he decided that a lack of calcium salts in the circulation, balks largely as a factor, if not in the causation, at least, in the continuance, of the malady. Besta came to conclusions of a similar nature. Mr. Arthur Littlejohn reported in the *Lancet*, May 15, 1909, that he had employed calcium salts with success in the treatment of a case of epilepsy. The patient in question was disoriented, incoherent, noisy, and spiteful, and was having fits of an aggravated petit mal type three to five times every 24 hours. After the administration of 15 grains of calcium lactate three times per day, her fits were abolished and her mental condition was very noticeably improved. However, the evidence in favor of calcium salts in the treatment of epilepsy is still conflicting.

Julius Donath, physician to the Nervous Section of the St. Stephen Hospital in Budapest, has published recently in *Epilepsia* a series of cases in which the administration of calcium salts appears to have exerted no favorable effects. Large, even heroic doses of calcium chloride were given in four cases with no beneficial effects, and in the other cases with but a slight diminishing influence. Indeed, the employment of calcium salts in epilepsy has not as yet passed

the experimental stage, and as a matter of fact, it is not definitely known whether the abnormal chemical changes of the blood observed in epilepsy are really cause or effect. Some other investigators have not been able to discover the diminution in the coagulability of the blood noted by Besta, he having found that in 37 out of 45 cases of epilepsy, the coagulability of the blood is diminished compared with the normal. Nevertheless, Perugia, in *Il Morgagni* for October, 1908, corroborated Besta's findings in 36 cases of true epilepsy, but curious to state, while affirming that the administration of calcium salts increased the coagulability of the blood of his cases, it did not influence either the number or the frequency of the attacks.—*Abs. from N. Y. Med. Rec.*

NICOTINE AND GASTRIC HYPERSECRETION AND ATROPINE AND HYPOSECRETION.—At a meeting of the Berlin Medical Society Dr. Skaller gave an account of some experiments he has carried out on dogs to determine the effect of nicotine on gastric secretion, not by direct contact of the nicotine with the mucous membrane of the stomach, but by absorption, through the blood. He finds that nicotinised animals have a continual gastric hypersecretion, even when fasting, and thinks that it is due to irritation of the peripheral nerve centres by the alkaloid. Experimentally, he finds that atropine is very efficacious as an antidote against this hypersecretion, and he points out that this conforms to clinical observations on man, and that symptoms due to tobacco abuse generally yield to systematic doses of belladonna, provided, of course, the patient at the same time abstains from smoking. Clinically, this gastric hypersecretion may not give rise to any symptoms or may be accompanied by paroxysmal painful sensations in the course of the afternoon or soon after midnight. Finally, the author distinguishes a clinical condition of a more severe type, characterized by actual crises comparable to the crises of tabes dorsalis. This form is accompanied by loss of flesh, and belongs to the group of gastroxynsis of Rossbach, and, in the author's opinion, often fails to be correctly diagnosed.—*The Hospital.*

DEATH FOLLOWING LUMBAR PUNCTURE.—Since the writings of Quinke have generalized the practice of lumbar puncture, we have seen a spread of the opinion that it may be accomplished with virtual impunity.

Minet and Lavoix (*L'Echo Médical du Nord*, April 25, 1909), report many fatal cases. They advise caution in cases of cerebral neoplasm. To be on the safe side, in such cases, have the patient preserve the recumbent posture for at least 48 hours, and during the operation have the patient upon one flank with the head lowered and the body in a modified Trendelenburg position. The foot of the bed may be elevated. Remain in this way for the first day or half day. Sicard claims perfect safety in this manner.—*Med. Times*.

THE FOOD VALUE OF ALCOHOL, PARTICULARLY IN DIABETES. Dr. Scarbrough of New Haven, Conn., (*Yale Medical Journal*), says: The use of alcohol as a food in cases of severe diabetes is of great importance. Until recently, we did not know whether the action was pharmacologic or nutritive. In 1906, Benedict and Török, in studying the origin of acetone bodies in diabetes, substituted the fat of the dietary by alcohol and found a marked decrease in the output of acetone, sugar and nitrogen. The sugar alone decreased 18 per cent. In severe cases with high ammonia, the output was greatly decreased. Their work adds further evidence of the protein-sparing action of alcohol. Neubauer, simultaneously, found alcohol of great service in severe diabetes. He used a wine containing 10 per cent. alcohol, allowing daily 12 to 24 ounces, equivalent to 450 to 900 calories of energy. He found regularly in severe cases a marked reduction in the output of sugar, acetone, oxybutyric acid and ammonia. The total nitrogen and the amount of urine was decreased.

ADRENALIN AN ANTIDOTE TO STRYCHNIN.—We are indebted to the *Indianapolis Medical Journal* for calling attention to the following important therapeutic item.

In a communication from von Noorden's clinic at Vienna,

Dr. W. Falta (Berl. Klin. Woch., Oct. 18, 1909), reports experimental research on guinea-pigs and rabbits in which injection of adrenalin seemed to neutralize completely several times the fatal dose of strychnin. This occurs whether the adrenalin and strychnin are mixed and injected at different points of the body, only in the latter case the adrenalin should be injected a minute before the other. The experiments on frogs demonstrated that the action of adrenalin as an antidote is not due to delay in absorption, but seems to be a biologic process of different nature. Experiments are now under way to determine whether it possesses the same powerful action as an antidote in respect to diphtheria and other toxins.—*Correspondenz-Blatt für Schweizer Aertze.*

PSYCHIATRY AND PSYCHOLOGY.

HEREDITARY MENTAL INSTABILITY IN THE INSANE AND MALINGERED PSYCHOPATHY.—Dr. H. A. Tomlinson, of the Minnesota State Hospital, points out that out of 2,366 non-criminal insane persons examined by him, that 12 per cent of men and 20 per cent of women were found to be unstable; 33 per cent of men and 26 per cent of women were primarily degenerated; 47 per cent of each were consecutive degenerates; 13½ per cent of each were senile degenerates; 166 men and 212 women had an heredity of insanity; 135 men and 76 women had an heredity of alcohol; 199 men and 170 women had an heredity of phthisis; 59 men and 60 women had an heredity of rheumatism; 72 men and 266 women had an heredity of cancer. In the families of 126 men and 120 women there was a concurrence of insanity. I give the following classification of the forms that the insanity took in these cases, to emphasize the fact that these cases were of a distinct class and not mongrel in type as we find in many medico-legal cases. Excited, 442 men and 266 women; depressed, 678 men and 454 women; delirious, 42 men and 50 women; stupid, 77 men and 109 women; demented, 442 men and 546 women. The following are some of the symptomatic manifestations of these cases: Olfactory hallucinations, 10

men and 17 women; visual hallucinations, 193 men and 160 women; auditory hallucinations, 608 men and 416 women; gustatory hallucinations, 36 men and 38 women; tactual hallucinations, 151 men and 48 women; visceral consciousness, 115 men and 67 women; sexual excitement, 109 men and 88 women; sexual perversion, 78 men and 35 women; grandiose delusions, 176 men and 70 women; depreciatory ideas, 104 men and 194 women; persecutory ideas, 585 men and 566 women; confused, 612 men and 449 women; religiosity, 175 men and 170 women; systematized beliefs, 40 men and 42 women.

Dr. Tomlinson says that the mental state of the patient was always dependent upon the form of sense perversion, and the nature of the delusion. That is, those who saw or heard what was pleasing or gratifying were exalted; while those who heard, saw or felt what was disagreeable or that suggested danger or misfortune, were depressed and excited.

Some of the physical stigmata were as follows: In 241 there was asymmetry of the head; in 1,041 there was asymmetry of force; in 101 there was general deformity; in 90 the superficial reflexes were absent; in 915 the knee-jerk was exaggerated; in 336 the knee-jerk was diminished; in 514 there was local paresis; in 185 there was general paresis; in 37 there was cerebral paralysis; in 22 there was bulbar, and in 17 spinal paralysis; in 103 there was epilepsy.

The larger number of these patients suffered from tremors of either the tongue, face or limbs, or from rest tremors. Reference to the tables concerned with the physical conditions present at the time of admission shows that practically all of these patients were suffering from some kind of physical disease, most commonly mal-nutrition, perversion of the digestive processes, and interference with the process of elimination.

. . . In true insanity the type is practically always faithful to the classifications; that is, in mania, melancholia, manic-depressive insanity, epilepsy, paresis, paranoia and other types we can expect a similarity in symptoms with only such deviation as the individuality of the patient, the environment, education, etc. would suggest. That where we fail to find the type of insanity well defined, and where

the individual does not represent any distinct classification, and there is reason to suspect simulation, it is well to proceed very cautiously, for in the majority of such cases simulation is likely to be developed. Second, that most cases of insanity have a physical basis, and that we can anticipate the train of symptoms that would naturally follow a given physical cause, such not being true in most cases of simulation. Third, that malingerers or simulators act upon suggestion, and being as a rule ignorant of the types of insanity, often simulate a train of symptoms totally at variance with the form of insanity attempted to be represented.

To detect simulation often requires time, patience, and absolute control of the individual and the surroundings. There are cases, however, where the simulation is so potent and blatant that it is readily recognized by those accustomed to seeing the disease which is attempted to be simulated. In all cases where there is reason to suspect simulation I insist upon being given every opportunity to investigate the matter before giving a definite opinion. In cases where there is doubt as to the diagnosis, it is often cleared by placing the individual under an anesthetic, and it is sometimes necessary to do so more than once.—*Dr. John S. Turner, Dallas, Texas, Simulation of Insanity in Criminal Cases. Texas Medical News.*

PSYCHIATRY.

POINTS IN EXAMINATION OF MENTAL CASES.—In cases of mental excitement or depression but little difficulty is experienced in obtaining facts sufficient for certification, but in certain cases the examination may be a very difficult proceeding, especially where the patient is suspicious of strangers or has some idea of the object of the visit. The patient who is aware that other people believe him to be deluded and are anxious to place him under restraint is capable of keeping his delusions for a time in the background, or of so "hedging" to questions that much skill and patience are required to discover his true mental state. Information

as to the patient's conversation and behavior are readily supplied by others, but as facts observed by the medical man "at the time of examination" are essential for certification, it is essential that the points to be observed should be kept in view, and that some method should be used to extract them.

When called to examine a patient who is a stranger, it is as well to inquire first from the attendant practitioner or from the friends as to the temperament, tastes, temper, intelligence, etc., of the individual when sane, as a knowledge of these points is necessary for correctly judging departure from the normal. During examination information is to be obtained on many points, and this only by more or less prolonged conversation on ordinary topics; the search for delusions, which the patient is on his guard not to mention, being left for some time, that his reserve may be broken. A physical examination, even if unnecessary, is often useful to open a way to conversation, but the best manner of commencing will depend on the mental attitude of the patient to the doctor and on the tact and resource of the latter.

The most important rules to be observed in the conversation are, to let the patient do as much of the talking as possible, and to avoid leading questions. The topics do not matter; they should at first have no connection with the known delusions, but should gradually be led round to them. The power of attention should be especially noticed, as lack of this power, to the ordinary extent, is one of the earliest symptoms of mental unsoundness. Sullen, suspicious, restless or impulsive behavior, laughter without discoverable cause, easy loss of self-control, and other abnormalities of conduct, may give warning of hallucinations of some special sense or of delusions. Deficiency of the general intelligence, as compared with the patient's normal standard, or with that which would be expected from his degree of education, may be noted. Incoherence in any marked degree is at once apparent, but the manner of thought and association require more careful observation. The emotions are important. Are they called into play with abnormal ease? Do they seem to rule the conduct unduly? Is antipathy

displayed to any particular person or persons without sound reason? In the answer to this last question will sometimes be found the clue to delusions. Memory for recent events is lost sometimes, particularly in alcoholic dementia, whilst that for more remote events is deficient in other cases.

Abnormal consciousness of self is a striking trait in melancholic patients, in the grandiose delusions of general paralysis of the insane, in alcoholics, and in the self-satisfied egoism of some other conditions. Power of reasoning and judgment may be seriously deficient either generally or on some special subjects, the patient being, so far as these are concerned, unable to distinguish between the essential and the non-essential or trivial. The imagination, too, and will power can both be tested.

The above points can be noted in the course of an ordinary conversation, and information on them forms valuable evidence as regards sanity or otherwise. If hallucinations or delusions are suspected or known to exist, but have not been brought out, questions as to their existence may be put. These direct questions are seldom necessary, however, as the patient will rarely talk for long without mentioning them if they do exist. Should the patient make statements which are believed to be delusions, but which may possibly be true or merely errors due to misunderstanding, care should be taken to ascertain that they really *are* delusions before stating the fact on a certificate. This, though generally easy, is, unfortunately, not always done.—*From the Hospital.*

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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

DR. SOUQUES' TRIBUTE TO BRISSAUD, President of the Neurological Society of Paris, with translator's preface tribute by C. Eugene Riggs, A. M., M. D., of St. Paul, the translator, adds this tribute also.

The Revue Neurologique (January 15, 1910) speaks with deep feeling of Professor Brissaud's early devotion to that journal, and his continued disinterested labors in its behalf. It reproduces a snap shot of him at work in his laboratory, and publishes the following eulogy upon him by one of his old pupils, Dr. Souques, in an address before the Neurological Society of Paris.

"Our Society has suffered a great and grievous loss. One of our most eminent members, Professor Brissaud, is dead. Hardly had the news of his illness spread abroad when great anxiety succeeded to the hope of the first few days, and then the denouement approached with tragic rapidity. The affectionate care of his family; the enlightened advice of his

friends, the ability of a celebrated surgeon; all were of no avail. In one month the disease felled him in the fullness of his power and intelligence. Brissaud was my master, and I recall his memory now only with the deepest emotion which for the scholar and man I feel and know, but which I can in no wise express. To understand his marvelous aptitude and his personality it is necessary to consider both his ancestry and his environment. The son of a university man, he was raised in a family where literature, the sciences and the arts were pursued with enthusiasm. His uncle, Dr. Fereol, one of our good, old teachers of the Charite, inspired him with a taste for the study of medicine and Charcot and Lasegue, under whom he was an interne, influenced him to specialize in nervous diseases and thus he became a neurologist, and speedily attained eminence as such. To enumerate here his remarkable works would be an impossible task, so large is the list; and superfluous, so well are they known. I cannot refrain from mentioning his original studies on Asthma, Pain and Anxiety; his ingenious views upon Little's Disease, and the Spinal Segment, his pathogenic conceptions of Paralysis Agitans and Tabetic Arthropathies. I can only refer to his wise investigations upon Tics and Spasms, Habit Pains, the Simulated Edema of Hysterics, Ophthalmoplegias, Contractures of Hemiplegics, and the Pseudobulbar Paralysis, and barely mention his researches in collaboration with Lamy, Lereboullet, Sicard, concerning the Catatonia of Bright's Disease, Spasmodic Sciaticas, Hemiparesis and the Treatment of Neuralgia by deep Injections of Alcohol. I must, however, recall his brilliant discoveries; Mental Toricollis, Dysthyroidian Infantilism, Reflex of the Fascialata; all three of which to-day bear his name; Spasmodic Laughing and Weeping, the Variable Chorea of Degenerates, and the clinical report on Acromegaly and Gigantism, which he studied with his co-worker, Henry Meige. I must not forget his Anatomy of the Human Brain and the Atlas which illustrates it, drawn entirely by hand—with perfect art, a monumental work representing prodigious labor, and of which I heard Charcot say that he was proud to have inspired it. In these later years he was interested in in-

dustrial traumatisms and the delicate problems of legal medicine to which these give rise. This study gave him the occasion to note a new psychosis, The Sinistrose, and to write, in the form of reports, a series of little masterpieces as interesting for magistrates as for physicians.

"Brissaud did not confine his attention to diseases of the nervous system. He left, in fact, valuable works upon The Tuberculous Nature of Scrofulous Glands, Cystic Disease of Mammals, Cancer, Adenomas, Tuberculosis of the Liver, Rheumatismal Bubo, etc. Then, again, in pathologic anatomy, as in clinical researches, he made profound investigations with judicious deductions and conclusions which bear his impress. He loved teaching, not theoretic and traditional instruction, which he despised as scholastic dogmatism, but practical and clinical teaching, illuminated by thorough laboratory methods. He multiplied again and again, the presentation of cases, and offered drawings and illustrations to amplify his statements. He taught clearly and simply, which, however, did not prevent his branching off from time to time into all the territories of medical science, history, histology, pathology, physiology, embryology. Those who had not the pleasure of hearing him will find at least an echo of them in those two beautiful volumes of lectures, delivered at the Salpetriere and at Saint Antoine. He believed books formed an indispensable complement to hospital experience, and so he assumed the heavy task of directing the preparation and publishing of the two great works, "The Treatise on Medicine and Medico-Surgical Practice," whose success surpassed his expectations. He was indifferent to nothing that concerned our profession; he loved scientific gatherings, and it is not necessary here to outline the important part that he took in the fusion of the Alienists and Neurologists of our country.

"Numerous and varied, strong and original, his work touched all the problems of medicine. He gained one of the first places among his contemporaries, his imperishable name passes to posterity, and his incomparable natural gifts, his wide sweep of knowledge, transformed and magnified by his own mind, even in the midst of scientists, artists

and men of letters, with whom he associated, made him a well nigh universal genius. His language was clear and keen, precise in etymologies, a philologist at times, he had written humorously a History of Popular Expressions Concerning Anatomy, Physiology and Medicine. His words were warm and penetrating; he excelled in happy illustrations, always finding the phrase that painted the thought, the word that remained in the mind. Among his friends his conversation was so interwoven with such unexpected sallies and spirited fancies that it proved a veritable feast. As an artist he possessed a love of the beautiful, a discriminating taste, a rich imagination, even a touch of fancy. Had he followed the career of arts and letters he would have attained in these a prominent place; he would have been a renowned artist in the 16th century; a famous encyclopedist in the 18th.

"What now shall I say of the man? I seem to see him entering here with that unforgettable air and that fine smile illuminating his face, with the powerful head and the masses of hair falling over the temple. I see him among us in his accustomed attitude, bent over a sheet of paper which he covered over with some mechanical design. One would have supposed him inattentive until, raising his head, he took part in the discussion, and then, when he finished, we listened still.

"Brissaud had a great heart, a strong character, a courageous conscience. Animated with generous thoughts, imbued with justice, enamored of the best, he possessed in a rare degree goodness, simplicity and modesty. There radiated from his person something that drew and held. Life treated him as an exception and heaped upon him early and without ceasing, titles, honors, dignities, service in the hospitals, a chair in the faculty, a seat in the academy.

"We accompanied him to his dear Nemours, where he reposes now between the gentle waters of the Loing and the rocks of the neighboring woods, in a spot made for his artistic soul. On the way each of us, sad as at present, recalled memories of his past, and I thought of the Italian proverb, 'The further one goes with those who depart, the

more grievous the parting.' Surely if he who has gone is regretted more than others, it can only be because he was loved more than others."

(It has seemed to me that a translation of the beautiful and illuminating tribute paid by Dr. Souques to Brissaud before the Neurological Society of Paris, showing, as it does, in panoramic view, as it were, the exhaustless activity of his mind, ought to be given to the readers of the journal. Brissaud ranked first among neurologists, not only of France, but of the world. This means much when we consider that this is the Golden Age of French Neurology, of which the great Charcot was the prophet; and when we recall such names as Raymond, Degerine, Marie, Gilles de la Tourette, Babinski, Dupre, Meige, Pitres, we can readily understand to what pre-eminence Brissaud attained.

Brissaud was a genius, but it was not his great mentality alone which distinguished him. He was as simple as he was great and in the many-sidedness of his nature, lay points of appeal to all.)

A CRIME AGAINST ETHICS AND OF ASPIRANTS FOR MEDICAL PRACTICE.—In 1907 and 1908 a State Board of Health after a perfunctory, inadequate and unfair examination decided that the laboratory equipment of a certain medical school did not, in some non-essential, suit them.

Thereupon it decided that the graduates of that school that year should not be allowed to come before the Board for examination. This cruel, unjust, personal-right violating denial of the right of graduates to show their qualification, refused because of a flaw purported to have been found in their college equipment, though denounced under mandamus by the Circuit Court, was sustained by the Supreme Court of Missouri that year.

Though this disqualification has since been removed against this school, if the law justifies such a ruling against the rights of graduated medical students—the right to show and use the property of professional acquisition—it ought to be repealed at once. The medical profession and schools should not stand for such a law in any state.

State Boards should have only power of examination as to qualification, not power to refuse examination to graduates of colleges they may not like. They should be compelled to give a fair examination to all who claim competent knowledge to practice medicine, whether the laboratory of the college suits them or not.

State Boards should only inquire as to the candidate's knowledge. The action of this Board is as if an accoucheur should refuse to permit the passage of a foetus or twins or triplets through the inferior strait because of some discovered defect, real or wrongly diagnosed, in the mother's mind. Now the doctor has rights during parturition as well as in embryo or post partum and no state board should interfere with these rights.

Think of these young doctors, after four years *in utero medicina almae matris* not being allowed even to try to pass and go out to practice, because of a flaw, real or unreal, in the ante-partem laboratory equipment of their alma mater, when some of them even had also got adequate laboratory instruction in other schools. It was cruel and unfair in this board, as it would be in any board, to refuse to examine graduated students, even if the college had not the required equipment to suit their ideas of laboratory necessities.

No great harm was done in this instance for these graduates have finally passed and in the subsequent years the graduates of this college have had no trouble. But with a weaker college and less numerous and loyal alumni the result to the school might have been disastrous. State Boards have no right to do things that might unjustly kill medical colleges or rob graduates of examination rights. Their regulations should only be advisory and they should not make ex-post facto rulings of this kind. Justice and ethical treatment are due young graduates as well as later made doctors.

NOISE NUISANCE AND PERIL.—The nasty noises of large cities have been called nuisances—they are worse—they are disease exciting and disease exaggerating perils. The reckless, heartless, indifferent noise maker in thickly populated

places should be classed among the criminals and treated as such. Noise is worse than smoke in great cities.

At the late third annual meeting of the Society for the Suppression of Unnecessary Noise, held at the home of Mrs. Isaac L. Rice, the founder, in New York City, Mrs. Rice told of a whistle in St. Louis with a "disturbing radius" of twenty miles and which disturbs two hundred thousand people every time it blows. Mrs. Rice proposed to make the New York mayor's life miserable unless he joined the crusade. The worst of the noises is the terrible grind of the iron wheel on the iron rail of the present over sized street cars, enlarged for dividend purposes, at the expense of millions of dollars in lost time of the people compelled to await their bulky, infrequent passage of street stopping places.

If a hackman went through the streets ringing a bell or a taxi tooting a horn continually, or if a cow with a bell on or either of these, they would be promptly squelched. They have no franchise to use the peoples' streets in that way. Their's is only an ordinary privilege and they must be considerate. The harm done in lost time and dollars and cents by the present rapid transit company is small compared with the health harm of these needlessly noisy tramways. They have driven all residents, who could get away, off their lines and into the country to University City and beyond. There is neither comfort nor health nor profit in owning a home on the St. Louis Rapid Transit lines and this damage to health and happiness and pocket has harmed the people more than their convenience has benefited and more than the immense capitalization, watered stock included, could compensate for.

It is a mistake from many points of view, especially from the sanitary, in the city governments, not to provide against needless noises, that is if the people are to be considered in this people's country.

But there are hurtful noises other than those of the city rapid transit tramway. Among them the steam car whistle, the peanut vendors shrill steam screech, the howling falsetto voiced newsboys who used to come on the street cars in procession proclaiming in soul-rasping notes the latest horrible

crime or catastrophe. But these latter noises, thanks to the P. A. Y. E. cars, on many lines, have been shut off.

Let us hope that sometime yet, during the lifetime of civilized humanity, the right value of quiet to city dwellers in happiness and health, may so shine upon our city legislators and executive officers once called city fathers, as to secure the annulment of needless nerve-racking noises and the quieting of the distressing noise makers. People who do not howl have rights in public highways that the howlers should be made to respect. The howl of the hoodlum and the honk and screech of certain unearthly noises from autos should be heard no more in the land.

MEDICAL INFORMATION FOR THE PUBLIC.—Anent Prof. Jonnesco's visit to this country and his operations with strychnine-stovaine the *Montreal Medical Journal* wisely says: The advantages of the strychnine-stovaine combination injected into the spinal canal are said to be that it is absolutely safe; this is not yet proven; the use of the method itself is already old, as age goes, in this rapid century, although the public, accepting what the newspapers say, do not know this. The man on the street thinks that Professor Jonnesco invented the use of anæsthesia in the spinal canal (this statement is made by a London illustrated weekly), that he is the first to operate upon the conscious patient, that it is very good of him to tell us all about it, and a fair number think that he is the first to demonstrate local anæsthesia at all. The result, looked at from any standpoint, is to put Professor Jonnesco in a false position. We are perfectly aware that Professor Jonnesco may not be in the slightest degree responsible for all these quarter-truths which the newspapers state. The more is this likely, because a similar publicity has lately been given to a prominent surgeon in an American city with regard to two operations for the removal of foreign bodies from the œsophagus. Knowing the surgeon concerned, we know he had nothing to do with this publicity, nay, that he has felt hurt by it; yet the papers have described these signs and wonders, and lo! they are operations that have been performed for years past

in all parts of the world. To any one who understands, the details of the operation sound as uninteresting and as crude as would a discourse on the electric telegraph given by a motorman to the electrical section of the Royal Society. One would feel tempted to lead the misguided motorman aside and say gently to him: "If I were you I wouldn't talk on that subject to these men: although you have only lately learned of the electric telegraph, these men have known about it for some time."

We know too well that in the medical profession there are men who seek to advertise themselves; the profession at large deprecates only a little less than it despises such tendencies, and properly refuses to be represented by such men. If medical facts are to be publicly presented, and if anyone has the requisite time to do it well, there is no reason why it should not be done; let the first requirement be that they must be *facts*; let medical items for a paper be edited and overseen by some one qualified to judge, before they appear: it is hardly likely that any reputable newspaper would allow its financial page to be printed without the supervision of some one who understood finance. To come from important to unimportant things, let there be some editing of medical information for the public, or else let the information be withheld, lest to the man who knows, the paper put itself in the light of something at which to laugh.

SUBMERGENCE OF THE ISTHMIAN SANITATION DEPARTMENT.—Medical men, sanitariums and people generally the country over, will be chagrined and surprised at the order of Lieutenant-Colonel Geo. W. Goethels, chief army engineer at Panama, discontinuing Colonel W. C. Gorga's important indispensable sanitary publications of his important hygienic work in the canal zone and military men will be surprised that a lieutenant-colonel can command a colonel in the medical department at all, in matters purely sanitary and not at all pertaining to the legitimate engineering work of the Panama Canal engineering department.

This brings up again the question of the rank and rights of the army medical corps and to it there is but one proper

answer for the honor of the profession and the welfare of the service and country and that was decided by President Roosevelt and his naval secretary in the matter of command of hospital ships by the members of the medical corps of proper rank. The journal *A. M. A.*, December 11, presents the right and truly sanitary side of this subject when it refers to the canal record's meager account of sanitary work under Col. Goethel's late erroneous, disastrous ruling and asks "how much importance would the American public attach to the opinions of a medical officer on the strength or position of dams and locks or the construction of steam shovels?"

This submergence of the most important department of canal zone work, so important that without it we should have failed as the French did, is a rank wrong to the medical profession and an affront to them and the American people. Neither the medical profession nor the people should submit to it. The surgeon general of the army and of the navy and of the Public Health and Marine Hospital department protest against this indignity, outrage and crime against the welfare of the workers in the canal belt and the sanitary good of the world, looking so eagerly to Colonel Gorgas and his masterly efforts for humanity and sanitary science.

The medical department in the Panama canal zone should be supreme in all sanitary matters. It should work and be heard directly and not subordinately through a lieutenant-colonel of engineers. The time for martinets and all other colonels mastering medical officers in matters of medical policy, publicity and science has passed. Gorgas should resist this as Baron Larry once successfully resisted Napoleon in a matter exclusively medical.

OF SPECIAL INTEREST TO MEDICINE AND HUMANITY in the Report of the Bureau of Commerce and Labor which ought to emanate from a National Health Department, is a comparison of the general expenses of the cities and payments for the maintenance of the health department. In several cities the state maintains a dispensary or health bureau,

but in most cities, nearly all the expense of the care of the public health is borne by the city alone. New York paid \$1,691,560 for the maintenance of its health department, or more than 6 times as much as any other city. The other cities paying more than \$200,000 for the maintenance of this department were Chicago (\$261,614), Philadelphia (\$253,709), and San Francisco (\$240,198).

Cities of over 300,000 population with notably small payments for their health department were Detroit (\$32,-987), Milwaukee (\$40,417), and Buffalo (\$44,358). In the smaller cities the large expenditures of Los Angeles and Oakland, California, include payments for the suppression of the Bubonic plague.

This is a good sign of right interest in the welfare of city dwellers. A better showing of sanitary results will be made when a wiser and more enlightened policy looks yet farther than now into the causes of the development of those states of the nervous system which make incapacity for right and self-sustaining citizenship—the idiot, the imbecile, the insane, the psychically and neurotically degenerate and otherwise mentally and morally unstable, like the tramp and the beggar, who do not know how to care or look for and secure a normal livelihood by rational systematized labor. Like the destroying of the unfruitful vine that encumbers the ground, something more than keeping the ever increasing horde of mental incapables and destructives that destroy the welfare of communities and a flood of incapable yet unborn, to increase and harm our social and political life in compound ratio, must be done by philanthropy, patriotism and science. There are surgical remedies of prevention of the propagation of the unfit that ought to be resorted to in certain judicially determined directions for the salvation of humanity and present and future society and government.

If the Department of Commerce and Labor want wisdom in this direction, let it ask of preventive medicine and apply the remedy.

ONLY FIVE DOLLARS AND FIFTY CENTS.—This heading in a scientific magazine may strike some as odd reading, especially with the following context, but this periodical aims to be for sanity and humanity and a decent healthful charity between man and man, hence our speech here.

Only five dollars and fifty cents is the price of a Pullman car ticket for about a night and a half day's ride from St. Louis to Denver. This amount had to be paid by a wage earning patient visiting a sick salaried relative at Denver, sick unto death, the attending doctor said, with tuberculosis.

We thought this lady's mind would be more at ease by responding promptly to see her bleeding brother before he died than to take a slower train and chair car, but the shock of that five fifty charge for one night's chance for sleep did not make a salutary impression on the poor lady. This exorbitant, uncharitable consideration of moderately circumstanced travelers is shockingly mean and tyrannical. It is an outrage of privilege and ought to be forcefully prevented by power of public sentiment and legislative control.

At any rate we step aside from our usual way to rebuke it. We have many times submitted to similar unjust rapacity toward ourselves, but never felt the force of the uncharitable crime against humanity as this instance has impressed its iniquitous injustice upon us. There was a time in the life of Mr. Pullman himself and Mr. Wicks, whom we knew personally, when such a tax as this for a chance for one night's sleep would have been a drain upon the purse of either.

These unreasonable Pullman charges are not healthy for the future of the company, in public esteem, even if they do help to the making of enormous dividends. There is a virtue and an ultimate reward to the fair-play policy toward the public even in a P. P. C. C. These charges remind us of the violent symptoms of dying convulsives, the epileptic status for instance, that presages dissolution.

The P. P. C. Co. must deal more fairly with the public or it will some day die and something better will succeed it.

The Lancet-Clinic of March 12th last contained a pertinent editorial signed G. S., which we interpret as meaning good samaritan, on the important subject of quietude in hospitals. The new St. Louis City Hospital authorities had better have adopted the tall sky scraper suggestion or selected a quieter locality for its place of construction. But here is the editorial. Ponder it and let us make no more blunders in the direction and location and conduct of our hospitals. A quiet abode for the sick doeth good like a medicine and helps medicine to do better for the patient. The psychiatry of the patient is an essential aid to vis medicatrix naturae therapeutics.

HOSPITAL ZONES OF SILENCE. A GOOD SUGGESTION.—In hospital construction location is being considered as much for the absence of noises as for salubrity and accessibility. In older hospitals, where population has grown around the structures, zones of silence are being obtained by proper paving of streets, elimination of street hawking, ringing of street-car and other bells, blowing of factory whistles, etc. Whole city blocks are being condemned, buildings are torn down, and the areas are being converted into parks and breathing places for convalescents and others. Every effort is being made to obtain a degree of silence conducive to rest and recuperation. If it be so essential to have silence just without the hospital, is it not equally imperative to have it within? The ringing of gongs and bells; the unnecessary clicking of telegraph instruments; the slamming of doors and other sources of unnecessary noises should be assiduously avoided by the attendants. In the halls of some hospitals are signs reading, "Silence is the law of this hospital," which seems to be intended for intimidation of visitors rather than observance by hospital attendants. At least, one would infer so in some institutions recently visited by the writer. In colleges of music rooms are so constructed as to deaden sound, that students in one room may not interfere with those in others. Why cannot this principal of construction be applied in hospitals? Nothing is so horrifying to the neurotic patient as the moans of a patient coming out of an anesthetic. Yet in some hospitals of recent construction it seems that

special effort had been made to enhance rather than deaden acoustics. Let us be consistent. G. S.

A DEPARTMENT OF HEALTH SPEECH of convincing force was made in the U. S. Senate last March by Senator Owen of Oklahoma. In accordance with the long ago suggestion of the editor of this magazine a medical man should be in the President's cabinet. And why not? Other interests, farming, commerce and labor, war, finance, etc., are so represented and none are more important than sanitation.

The Oklahoma senator's estimate of the six hundred thousand lives lost annually in the U. S. for lack of national health board and the sanitary salvage such a board would bring about is probably half a million below the actual preventable death rate.

It is impossible to compute what a national department of public health would actually save in life and service and treasure. Besides the impure food and drug and drink, water, meat, milk and tuberculotic, typhoid, malarial and bad alcoholic fatalities, there is the degeneracy dangers that menace from the hordes that come in at Castle Garden and across our borders elsewhere and the frightful idiocy, epilepsy, insanity and other psychoses and neuroses from in and in-breeding of brain defectives, of which the senator from Oklahoma makes no adequate note, conditions of organism that menace the future stability of our citizenship and government. To endure and attain longevity, nations, like individuals, must be strong and healthy, with stable brains. *Mens sana in corpore sano* is a trite old maxim and with reference to our great Republic, *Esto perpetua* is the true patriotic American's hope. The "flag of the free heart's hope and home" and what it waves for will need the steady brained and brave and strong to uphold it in its march of destiny for the uplifting and upbuilding of humanity.

DR. BULL AND THE PSYCHICS.—New York Spiritualists, at Dr. Bull's request, pray for the Hyslop girl. Why should not prayers be made for anyone? Improvement is noted. Physician said patient was at the point where human power

was futile. How did he know this? Other physicians have given up hope in other cases yet spontaneous recoveries have followed under other circumstances. Mistaken prognoses are common in medicine both in regular and erratic practice. The Christian world prays whether doctors quit or continue treatment.

"Spiritualists and believers in the psychic all over New York were lately, say the secular press, engaged in concerted prayer, invoking mystic power for the recovery of Winifred Hyslop, apostle of the psychic."

Miss Hyslop was suffering from typhoid and prayer in her behalf was suggested by Dr. Tytus Bull.

Why should a physician who believes psychic power from heaven all potent insult the higher psychic healer by trying his own puerile powers first and without in the beginning asking higher psychic aid and keep on trying? Why cease effort when the panpsychic power that made the microbe, that makes the typhoid and lets man discover the Eberth bacillus and creates doctors and permits them to find and destroy it in the system, to effect a cure through and by the microbe killer as well with, as without His aid? He helps us as He does the sparrows, but does not enjoin nor debar us from using food. Christ did not abandon physical means, the pool of Saloam and the anointing, for example.

THE UNSTABLE NEURONE AGAIN appears in a New England girls' high school at Bridgeport, Conn. The hazers were daughters, it is said, of leading families.

This is what the young neurotic she devils are said to have done.

They gave her 3-inch strips of macaroni boiled in soap, members of society dancing about her and telling her as she ate that the decoction was angle worms.

Fed raw oysters with the cheerful information afterward that she had swallowed pollywogs.

Made to drink a cocktail of molasses, vinegar, salt, pepper and white of an egg, and then a mixture of milk and sugar, from a nursing bottle.

Sealing wax, melted by a candle, allowed to drip on her arm, constituting "branding."

Red-hot poker held before gaze of victim, who then was blindfolded while a cube of ice was pressed against her bare shoulders and the hot poker plunged into a piece of raw meat, the odor of the burning flesh.

The shock of this torture sent the poor girl to a sanitarium chronically broken in her nervous system. Race suicide before these hazing girls were born would have been salutary.

The fact that the father of this shockingly treated girl is a member of the Connecticut Legislature may result in a law making hazing of the cruel sort a crime or insanity, treating such hazers accordingly.

The golden rule and personal rights seem to have no place in the brains of these unstably neuronated young women.

MEDICAL STANDARDS; MEDICAL PROGRESS.—We should not give so many hours of study that the students will be physically exhausted, nor should we give so much mental labor that the students become stale. The curriculum can be improved by giving attention to the law of variety and monotony. Each day the student should have exercises of sufficient variety to excite his attention, but not so many as to dull his interest. I would suggest that we try to arrange our clinical curriculum along the line of the three great branches of practice: medicine, surgery and obstetrics and gynecology. The clinical laboratory should not be a separate department, but a phase of the work in all the departments mentioned. The curriculum of the clinical department must center about the hospital. No school of medicine is adequate for present-day needs unless it is possessed of a hospital of its own. Clinical teaching should be practical and not irrelevant. I would suggest that we work in harmony with other organizations now interested in medical education; that we take their suggestions and recommendations and examine them in the light of our own experience, and in the light of pedagogics.—From address of the President, Dr. Geo. Howard Hoxie, before the Association of American Medical Colleges. J. A. M. A.

A CLINICAL FIELD OF ABNORMAL HUMANITY in its psycho-sexual sphere is the world around us. That barbarian chief who proposed to emasculate the celebrate missionaries so as to insure practice in accordance with precept had a cautious, conservative idea of the safety, if not of the sanctity, of his harem.

A large part of the crimes of civilization, as we call our social and moral veneer, are due to perverted, unbridled venery. The remedy lies in pre-natal prevention rather than in post-natal punishment and restraint. Lechery and lust and otherwise perverted love passion determined murders, are so common and so inadequately understood by police or provided against by law, as to demand a livelier and more intelligent consideration of this subject.

One subject of harm in this direction ought to be stopped, viz.: The lust and murderous revenge picture shows and lascivious sign board displays. Passion grows upon what it feeds and evil lecherous suggestions are especially harmful to organisms over-strong in sexual impulsion and over-weak in psychic restraint over their sexual inclinations spheres.

There are more things in the world of sexual psychopathy than are dreamed of among the ordinary penalogists of the police force.

THE TRUE TYPE OF AMERICAN CITIZEN as viewed abroad in Ex-President Roosevelt.

The Paris Times (La Temps) of April 20th, speaking of ex-President Roosevelt's tour of Europe, unparalleled in history, said:

"No democracy chief of state," the paper says, "ever before enjoyed such popularity. We are accustomed to formal visits of Kings and Presidents, but Roosevelt is no longer President. It is the man, therefore, not the office, which is being honored. It is his vigor, his personality, his character, ideas and temperament which appeal to European opinion."

After reviewing his career, *La Temps* concludes:

"Few are more worthy of the esteem of the democracy, for he represents at the same time liberty and authority—those two antitheses which republicans, conscious of their duty and solicitous of the future everywhere, are trying to harness together."

The Times reflects the tone of the entire French press. Like a famous wise one of old he can say after all his official, strenuous and sorely tried official life, he has preserved his integrity. It is a good sign of the great awakening of our times, both in America and abroad, that integrity and honor both command approbation and respect and applause.

VASO-MOTOR RHINITIS. COLD DOUCHES TO THE BACK OF THE NECK.—All rhinitis is vaso-motor. Without the vaso-motor system the present congestive and inflammatory symptomatology of rhinitis would not appear and without the contractile impression on the cilio-spinal area would not take place. The disease aside from its microscopic cause and its remedy are possible through the vaso-motor system.

Dr. O. Muck has observed that when cold water is poured on the back of the neck a stopped-up nose will presently become "permeable" to the air (*Münch. Med. Wochschr.*, 1909, Nr. 29.) The blood vessels of the nasal mucous membrane are reflexly contracted. The author therefore employs cold douches to the back of the neck in rhinitis vasomotoria. Also in acute inflammatory swelling of the mucous membrane, especially in coryza, one can by this means remedy the stopped-up condition of the nose, and thus allow for the more rapid escape of the secretions. The author further believes that owing to the proximity of the vaso-motor and respiratory centers in the medulla these douches also act beneficially in bronchial asthma, especially of nasal origin.—*Therapeutic Medicine. Med. Prog.*

A LIFE SAVING INDEPENDENCE DAY IS IN PROSPECT.—The Anti-noise crusade of the *Alienist and Neurologist* is bearing fruit. It has inspired Mrs. Annie L. Rice's and the daily press' efforts with the authorities for the suppression of the

small boys' and big fools' fire cracker and fire arms foolishness and sensible, oratorical, parade and safety regulated fireworks are this year to take their place in most American cities.

A "safe and sane" non-explosive and tranquil, thoughtful patriotism is to supplant the noisy, violent casualty and disease causing demonstrations of the past Fourths of July, ex-President John Adams to the contrary notwithstanding.

Dangerous explosives and the sounding of bells and whistles are out of date and superseded for the best of patriotic and sanitary reasons.

DR. HYDE CHARGED WITH THE MURDER OF COLONEL SWOPE by poisoning, at Kansas City, was confronted in court before the jury with a nurse girl's story that he killed another man—an apoplectic—by bleeding. Now apoplexy is itself a bleeding into the brain and usually unto death. This old treatment before substitutive medication was known, for contracting the arteries and arterioles in the brain, was used to direct the blood flow there from and contract the vessels there and phlebotomy was often successful in relieving it.

But why should the court let in such non-medical and irrelevant testimony which could show no more than a possible error of judgment in a matter not germane, because not included in the indictment?

THREE MILLION PEOPLE ANNUALLY SICK with preventable diseases, is the estimate Senator Robert L. Owen, of Oklahoma, makes of the sanitary condition of the United States, who has a bill for a department of public health with a chief physician in the president's cabinet, which would cause a change for the better in that many people would be put back into the fighting ranks of life's battle who are each year *hors du combat*.

Besides this he claims that six hundred thousand lives would be saved every year. Of course, this might put some undertakers out of business as the suspended business of distillers, barkeepers and brewers would, but the *Alienist and*

Neurologist is, as it always has been, for a department of public health very close to the president and the Congress of the United States.

A *PATHOPHOBIC* whose fear of pursuing enemies was so great that she secreted herself in an unlocked trunk, remaining there a week or more and dying there of fear, shock and starvation and possibly of added chloroform and carbolic acid, which she had taken with her for suicide to avert the possible torture of capture, is chronicled in the newspapers as a remarkable psychological phenomenon. Fear of pursuing enemies is not an uncommon morbid fear in impending psychasthenic insanity, except in the minds of newspaper novices in knowledge of psychopathic symptomatology. Yet secreting one's self in a trunk and dying there is rare.

WHY SHOULD THE AMERICAN NEUROLOGICAL ASSOCIATION decline to discuss the subject of Vaccine Therapy as neither germane nor pertinent to Neurology, as assigned to it by the Congress of American Physicians?

States of the nervous system certainly have relations to immunization, anaphylaxis, alexins, etc. Erlich's side chain theory, opsonic index, etc. and the reciprocal relations of blood composition and nerve center states would certainly justify an attempt at working out the problem of vaccine therapy and neuraxis conditions.

The field of psycho-neural and hemic conditions is not yet so fully clarified as to exclude neurology from this study. Then there is the nervous system of the chameleon to give analogy of consideration of vaccinia.

THE EQUIPOISED NEURONE is in evidence in America's traveling ex-President. As a representative American citizen abroad he brings no shame to the true hearted lover of what real Americanism stands for in behalf of mankind. At home as president, he lifted his hand against the pestilence of sordid, grasping, syndicated, franchised unrighteousness and the plague is being stayed. Abroad he vindicated, like his able colleague, ex-vice-President, the American citi-

zen's right to select, unimpeded and without dictation to his own right moral and social affiliations. And in his speeches he lets principalities, powers and people know an honest and true American's convictions that the world, in its policies of governing man, must not go backward.

ANOTHER IDIOT SAVANT MATHEMATIQUE was presented to the Société Clinique de Médecine Mentale de Paris by M. Blin in the person of a child of twelve years who mentally had reached the limit of mental debility and imbecility, although this idiot showed a singular aptitude at indicating the number of days included in the years 1908, 9, 10 and 11. The mental reaction time of this imbecile calculator in solving these sums varied from two to five seconds. Except the facility displayed in calculating these dates this child was absolutely illiterate.

ALIENISTS AT NEW HAVEN IN MOVEMENT to better conditions of insane. A notable gathering of medical men in this city was held Jan. 13th. The purpose of this society is to promote the welfare of those afflicted with mental and nervous disease in Connecticut, the discussion and promulgation of scientific principles and their application for the treatment of cases of mental and nervous disorders. Dr. D. W. MacFarland, of Green Farms, was elected president.

STATE HEALTH BOARD ELECTION.—The State Board of Health, at its annual session in Jefferson City, January 10 to 12, elected the following officers: President, Dr. Ira W. Upshaw, St. Louis; vice-president, Dr. Ernest F. Robinson, Kansas City; and secretary, Dr. Frank B. Hiller, Kahoka (re-elected). The board will move the office of state bacteriologist to Jefferson City, and equip a laboratory there in connection with that of the State Board of Health.

GRAY'S GLYCERINE TONIC COMPOUND.—For over sixteen years this standard tonic has filled an important place in the armamentarium of the country's leading physicians as a stomachic promoter of digestion and vaso motor tonic. From

the first its formula was an appealing one, and its high quality and constant unvarying uniformity have justified every confidence. In every way, this time-tried preparation has proven efficient and trustworthy.

WASHINGTON UNIVERSITY through the liberal five million and a half endowment of Messrs. Brookings, Busch, Bixby and Mallinkrodt is to become a rival to the greatest Eastern universities in financial resources and instruction, especially in its medical department.

As a native citizen and life long instructor in medicine we thank the donors and congratulate the University, the city, the people and the profession for this liberal contribution to medical education.

DR. W. C. WILE retires from the editorial management of the *New England Medical Monthly* because of failing health. We are sorry to learn this, because, both of his ill health and of what the profession will lose from among the corps editorial. But we are glad to know that Dr. Wile is not yet a corpse and hope, after he shall have been free from the burden of his editorial labors, he may go right on again in health and yet "live long and prosper."

THANKS OF THE ALIENIST AND NEUROLOGIST are extended to Dr. Gallinger, Senator from New Hampshire, for his aid of Senator Owen's bill for the creation of a Department of Public Health. This is the most important bill before the present congress and should become a law. Senator Gallinger should have the gratitude of the entire medical profession and the people.

Right sanitation, psychical and physical, is the best assurance of perpetuity for this Republic.

MADAME CURIE is reported as having isolated one-tenth of a milligramme of polonium from pitchblende. Polonium's radio activity exceeds that of radium. Polonium is said to lose fifty per cent within five months, the residium of its disintegration being helium and plumbum. Mr. Lippman

makes this and some further report to the Paris Academie des Sciences and names M. Debierne as collaborator with Mme. Curie.

MARK TWAIN (SAMUEL L. CLEMENS) TO THE DOCTORS. —When the Missouri State Medical Association, in session some years ago at Hannibal, Missouri, invited Mr. Clemens to their banquet, the humorist being on a visit to his old home for his health, having a touch of neurasthenia and nostalgia, added to his declination regrets, the hope that the doctors "would continue to take life easily as heretofore" and they have continued to do so ever since.

POPULAR EDUCATION IN HABITATION HYGIENE was the theme of Joseph Guerin at the National Congres d'Assainissement et de Salubrite de l'Habitation last November.

At this important Congress the entire subject except psychic hygiene received much attention of popular value in its many important aspects.

THE INTERNATIONAL AMERICAN CONGRESS OF MEDICINE AND HYGIENE assembled this year at Buenos Aires, Argentine Republic, May 25th, in commemoration of the first centenary of the May revolution of 1810, under the patronage of His Excellency, the President of the Argentine Republic. This congress is largely supported by physicians of the U. S. A. also.

THE OPIOPHAGES AND SMOKERS OF OPIUM IN PERSIA are next in number to those of China, says Dr. G. H. Paschayon Kahn of Post-Giz, Persia.

TWO MEDICAL COLLEGES ONLY are illustrated as the entire St. Louis showing for the *A. M. A. Journal* for May seventh. Yet there are several others with quite as imposing buildings, and hospital annexes and quite as capable medical teaching faculties. Why is this thus?

A BRASSY GOLD BRICK is the peculiar metaphor applied by a brilliant Iowa legislator to the Owen bill in Congress for

a National Department of Health. He calls it also a regular doctor's trust proposal. He considers present medical trust fees exorbitant.

"MARK TWAIN" (Samuel Clemens) the talented son of Missouri, recently dead, left to the world a millionaire legacy of humor.

He was a psychotherapeutic philanthropist who made melancholia and pessimism flee at his bidding and caused the man of depressive moods to consider life worth living.

VIRGINIA UNIVERSITY COLLEGE OF MEDICINE.—A new and magnificent building is to be erected on the site of the old college destroyed by fire January sixth at Richmond, Virginia

MOVING PICTURES ARE PROVIDED FOR INSANE at the Norfolk Asylum, Nebraska. Superintendent J. P. Percival says that these pictures divert and soothe patients.

THE NATIONAL ASSOCIATION FOR THE STUDY OF EPILEPSY AND THE CARE AND TREATMENT OF EPILEPTICS will meet at Baltimore, Md., May 7th, 1910. An attractive list of papers is presented in the program.

AMERICAN ACADEMY OF MEDICINE will meet at Hotel Jefferson, St. Louis, Mo., June 4-6, 1910.

THE AMERICAN MEDICAL EDITORS' ASSOCIATION will meet in St. Louis, June 4-6, 1910, Planter's House.

CORRESPONDENCE.

DEAR DOCTOR:—The management of the Glen Springs announced that on Monday, May 2nd, 1910, Dr. John M. Swan, of Philadelphia has assumed the duties of Medical Director.

Dr. James K. King relinquished the executive responsibilities of the Medical Staff and has become Consulting Physician.

Dr. Swan will be glad to correspond with any former or prospective patrons concerning the medical work of the Sanitarium.

Yours very truly,

WM. E. LEFFINGWELL, President.

THE DEATH OF KING EDWARD OF GREAT BRITAIN, attributed to pneumonia, might well have been assigned to the Budget and its brain strain as predisposing causes. Although the King had reached the pneumonia predisposing age he was vigorous and resistive in his nerve centers up to the beginning of his Majesty's worry over this agitation against the unfair land tax and the attitude of the House of Lords on the Budget question.

This matter made a vivid impression on the editor, who was in London and other parts of Great Britain at the time, and it was the impression of those close to the King that the subject gave him great concern, for he was a just monarch, much concerned for the welfare of his people. In his life he applied the motto, *Dieu et mon droit*, not alone to himself and his personal interests, but to all the British people. Though every inch a king he was great and kind and wise, as a modern ruler.

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

THE PROPAGANDA FOR REFORM IN PROPRIETARY MEDICINES;
Sixth edition: Containing the various exposes of nostrums and quackery which have appeared in *The Journal of the American Medical Association*. Price, Paper, 10 cents. Cloth, 35 cents. Pp. 292. Illustrated.

This book presents in convenient form most of the exposures that have appeared in *The Journal of the American Medical Association* showing fraud either in the composition of various proprietary preparations or in the claims made for such preparations. Not all of the products dealt with, however, are such as are—or have been—used by the medical profession. Many preparations of the “patent medicine” type have been subjected to analysis and the results of such examinations appear in this volume. The book will prove of great value to the physician in two ways: 1. It will enlighten him as to the value, or lack of value, of many of the so-called ethical proprietaries on the market; and 2. It will put him in a position to answer intelligently questions that his patients may ask him regarding the virtues (?) of some of the widely advertised “patent medicines” on the market. After reading the reports published in this book physicians will realize the value and efficiency of simple scientific combinations of U. S. P. and N. F. preparations as compared with many of the ready-made, unstable and inefficient proprietary articles.

Whatever is candidly monitory in this book should be considered. Nothing should be taken as mandatory. Read the book and hold to whatever is true therein. The book does not go far enough in respect of the flood of foreign patent products offered to American physicians under new names, numberless. Doctors should know what they are doing in therapeutics and what is being done to them by certain home proprietary and many foreign patent therapeutic caterers and get back to extemporaneous prescriptions of remedies whose composition is well known. Not all

proprieties call for censure. Some are honest, some are not.

We do not endorse the criticism on Campho-phenique nor Parke, Davis and Company nor Bromidia, which latter however ought only to be prescribed for night use. The profession is largely indebted to Parke, Davis and Company for the promotion of valuable therapeutic usage in this country of Adrenalin, Thyroid and other ductless gland therapy and for Cascara, etc.

NOTES ON THE TREATMENT OF ACUTE INSANITY. By Sanger Brown, M. D., Professor of Clinical Neurology, Medical Department of the University of Illinois, etc., Chicago, from the *Illinois Medical Journal*.

It is gratifying to see a neurologist taking a practical clinical interest in psychiatry. The quietude and fresh air environment of the insane is as essential as in all other disease, as valuable as fresh air and sunshine in tuberculosis without the cold air and draught fad with head out of doors in all kinds of weather.

ELECTRIC BATH TREATMENT IN 120 CASES OF MENTAL DISORDER. By Mr. Mackenzie-Wallis and Dr. Edwin Goodall, read at the meeting of the Medico-Psychological Association of Great Britain and Ireland.

This communication deals with experience of electric bath treatment extending over a period of nine years and covering about 120 cases. The administration of electricity by means of alternating sinusoidal current in a bath is recommended as superior to the usual faradic and galvanic methods.

The Medical Fortnightly, that excellent bi-weekly magazine for the general practitioner, conducted by Dr. Hopkins, is never disappointing in its profitable and interesting contents. It is the only magazine in the central west issued oftener than monthly. It should be on every physician's table. Dr. Robert G. Eccles' enlightening and entertaining series of travel papers going through all issues since October, 1908, is worth the subscription price for an entire

decade. The place for the *Fortnightly* is on every doctor's table or in his coupe.

DISTURBANCES OF THE INTERNAL SECRETIONS CLINICALLY CONSIDERED. By Oliver T. Osborne, M. A., M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine at Yale Medical School, New Haven, Conn. From *The Journal of the A. M. A.*

A theme of much interest and well treated and confirmatory of Sajous' marvellous biologic revelations.

SAUNDERS' BOOKS, a descriptive catalogue of medical and surgical works, illustrated, thirteenth edition, revised to February, 1910. W. B. Saunders Company, 925 Walnut Street, Philadelphia. This is a commendable effort to show by illustration and terse description the features of the excellent books this firm offers to the medical profession. Its perusal will benefit both physicians and publisher. We say this unbiased as this firm does not advertise with us, which is the only mistake they make in the line of their business, as the *Alienist and Neurologist* could send their good name around the entire world, America, Ireland and Central America included.

AMERICAN ILLUSTRATED MEDICAL DICTIONARY. The new (5th) Revised edition of Dorland's American Illustrated Medical Dictionary is a complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Nursing and kindred branches, with new and elaborate tables and many handsome illustrations by W. A. Newman Dorland, M. D. Large octavo of 876 pages, with 2000 new terms. Philadelphia and London. W. B. Saunders Company, 1909, flexible leather covers, \$4.50 net; indexed \$5.

This valuable dictionary is always on our editorial table and daily consulted with satisfaction. It is the best of medical lexicons in our language.

PROCEEDINGS OF THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION at the Sixty-fifth Annual Meeting held in

Atlantic City, N. J., June 1-4, 1909, published by the Association.

This attractive volume contains the usual table of interesting contents, the subjects being well presented and discussed by alienists from proper standpoints of right clinical experience and will not therefore mislead the reader who seeks real psychological illumination on the themes handled by experts. The crude views of the novice and dillitante alienist do not appear here, as we often see them spread by the inexperienced, before courts especially.

Annali della Clinica della malattie mentali e nervose della R. Università de Palermo, Volume III. pubblicato nel 1909. Amminis trazione: Prof. R. Colella, Clinica della malattie mentali e nervose—Palermo.

This excellent volume of transactions comes regularly to our table and is at the service of the Italian physicians of the city who may wish to refer to it. Every Italian alienist and neurologist and all advanced physicians should read it regularly.

Bulletin of the Committee of One Hundred on National Health, being a report on National Vitality, Its Wastes and Conservation, prepared for the National Conservation Commission by Professor Irving Fisher of Yale University, Member of the Commission.

This report is well worth the reading of any physician and philanthropist or patriot. Section five on the need of lengthening of human life is especially entertaining and valuable.

Diagnosis of Insanity. By F. W. Langdon, Cincinnati, O. This is one of the best contributions that has come to our sanctum for many a year.

It is an expert presentation from an expert source of clinical observation, the only source whence competent diagnostic testimony in matters of mental aberration should come. "We must live with the insane," says Esquirol, "to understand them." Beyond clinical study of the sub-

ject "there is" as the author truly states, "no royal road to diagnostic knowledge." The author correctly considers the entire man in the brochure before us in estimating the subject of insanity and knows as a true scientific clinician whereof he speaks. He is professor of psychiatry in the University of Cincinnati and is the superintendent of an hospital for the insane.

Laboratory Methods to the Exclusion of Clinical Investigation. Dr. H. M. Goodman, in *International Clinics* speaking as a laboratory man, decries the tendency of modern times to depend entirely too much on laboratory methods to the exclusion of clinical investigation.

Dr. Goodman does not mean to underestimate laboratory diagnosis, because it occupies an important place in medical investigation, but what he says is—without fear of contradiction, because he thinks he has had sufficient personal experience to know—is that we are not justified in turning over specimens of urine, blood and other secretions to the laboratory, where the work is done usually by inexperienced men, and expect them to make a diagnosis which we as clinicians are unable to do. The entire article is interesting.

A Case of Pure Word-Deafness with Autopsy. By Albert M. Barrett, M. D., in the *Journal of Mental and Nervous Diseases*.

This study is of a case which presented clinically a clearly classical example of that disturbance of speech which, from the descriptions of Lichtheim and Liepmann, has been called subcortical auditory aphasia or pure word-deafness. It was possible in this instance to obtain a thorough examination of the subject's speech capacity and later to study the brain by the method of serial sections.

Vaschide, Viollet, Marie, Lubomirska, Meunier, Laures: Contributions to Psychopathology. By Frederic Lyman Wells from the *Journal of Philosophy, Psychology and Scientific Methods*.

This is a good critique of these meritorious and always

interesting writers. The staff of the McLean Hospital at Waverly is an active and earnest one, making good contributions to the literature of psychopathology, of which these are samples.

Report of an Epidemic of Bacillary Dysentery at the Danver's State Hospital, Massachusetts, 1908.

This is one of the most and many valuable reports, as good as a book on the subject from the laboratory of the Danvers State Hospital, Hawthorne, Mass. It is reprinted from the *Boston Medical and Surgical Journal*, Vol. clxi, No. 20, pp. 679-714, Nov. 11, 1909.

Its text and bacillary illustrations will interest and enlighten all who may read whether alienist, neurologist or general physician. D. C. Heath and Company, of Boston, are the publishers.

The microscopic analysis of the intestinal lesions and the blood cell picture in bacillary dysentery are especially profitable to clinicians.

The following are the contributions to this work:

Statistical Report of the Dysentery Epidemic at the Danvers Hospital, in 1908.

Investigation of the Possible and Probable Sources of Infection and the Causes of Spread of Dysentery in Danvers Hospital.

The Occurrence of Dysentery in Hospitals and in the Community at large, with a summary of the Prophylactic Measures which should be Employed to Check the Disease. By C. T. Ryder.

Identification of Epidemic Dysentery in Danvers Hospital as Due Mainly to *Bacillus Dysenteriae* (Shiga type.) By E. T. F. Richards, M. D., C. M., with the assistance of Anna H. Peabody, M. D. and Myrtelle M. Canavan, M. D.

A Study of Agglutinations in Danvers Dysentery Cases: Comparative and Serial Tests with the Shiga and Flexner-Harris Strains of *Bacillus Dysenteriae*. By E. T. F. Richards, with the assistance of Doctors Peabody and Canavan.

The Blood Cell Picture in Bacillary Dysentery. By Myrtelle M. Canavan.

The Lessons of Bacillary Dysentery. By E. E. Southard, M. D., and E. T. F. Richards.

The Nervous System in Bacillary Dysentery, by E. E. Southard, with the assistance of C. G. McGaffin, M. D.

Ulcerative Vaginitis in a Case of Bacillary Dysentery. by Myrtelle M. Canavan.

Conclusions from Work on the Danvers Dysentery Epidemic of 1908 by E. E. Southard.

An Analysis of Psychoses Associated with Graves' Disease. By Frederick H. Packard, M. D., Pathologist, McLean Hospital, Waverly, Mass., from the *American Journal of Insanity*.

Forty-ninth and Fiftieth Annual Report of the Longview Hospital, Cincinnati, to the Governor for the Biennial period ending Nov. 15th, 1909.

Chronic Headache: Neurological Advances Regarding Its Diagnosis and Treatment. By Tom A. Williams, Washington, D. C., from the *Charlotte Medical Journal*.

Therapeutic Notes, Parke, Davis & Co. An instructive brochure for the general practitioner and for any doctor of medicine.

Hereditary Spastic Paraplegia. Report of Seven Cases in Two Families. By John Punton, A. M., M. D., Kansas City, Mo.

Epidemic Poliomyelitis; Report of the Collective Investigation Committee on the New York Epidemic of 1907. Is sixth of the excellent valuable two dollar monographs of the Nervous and Mental Disease Series, 119 pages and illustrations. This report is especially timely; an epidemic of cerebro-spinal meningitis is now prevailing in New York.

National Association for the Study and Education of Exceptional Children—Preliminary program of Conferences on the Exceptional Child.

A Study of Swedenborg's Psychical States and Experiences. By John Whitehead, A. M., Boston, Mass., Church Union.

Ninth Annual Report of the New York State Hospital for the care of Crippled and Deformed Children for the year ending Sept. 30, 1909, Hospital at West Haverstraw, N. Y.

Notes on Lithium. By Enno Sander, Ph. D., Ph. G., St. Louis.

Suprapubic Prostatectomies. By Charles H. Chetwood, M. D., from the *Amer. Jour. of Mental Sciences*.

The Outlining of Normal Organs and the Diagnosticating of Diseased Conditions of the Pleura and Lungs by Means of Palpitation. By F. M. Pottenger, A. M., M. D. Monrovia, Calif., from the *Lancet-Clinic*.

The Effect of Tuberculosis on the Heart, by F. M. Pottenger, M. D., Monrovia, Calif., from the Archives of Internal Medicine.

Matteawan State Hospital. Fifteenth Annual Report of the Medical Superintendent for the year ending Sept. 30, 1909. Fishkill-on-Hudson.

Current Conceptions of Hysteria. By William A. White, M. D., Washington, D. C., from the *Interstate Medical Journal*.

Habitual Constipation. By Dudley Roberts, M. D., Brooklyn, N. Y., from the *Medical Record*.

A New Physical Sign, Probably a Skin Reflex, Whereby Solid Organs, Such as the Heart and Liver, and Inflammatory Processes found in the Lungs and Pleura may be detected by Palpitation. By F. M. Pottenger, M. D., Monrovia, Calif., from the *Medical Record*.

A Great Thinker. Being a reprint of the articles published in the *New York Sun*, September 6-13, 1908. By M. W. Haseltine.

"FAIRCHILD'S PEPTONIZED
MILK, OR THE JUICE OF CORN"

"BE SURE TO
GET THE PEPTON"

"IT IS PURELY AN
ANATOMICAL
DIFFICULTY"

"THIS CASE BELONGS
EXCLUSIVELY TO
THE ALIENIST"

"IT'S ONLY A
FAINTIN' FIT"

"A LITTLE
SUGAR IN
THE URINE"



A Consultation

"NOTHING BUT A PROMPT
OPERATION WILL SAVE
THIS MAN'S LIFE"

PUBLISHER'S DEPARTMENT.

A MOMENTOUS MEDICAL CONSULTATION.

A humorous pen sketch by a senior of the Medical Department of the Barnes University, St. Louis. The faces of the faculty (seven of the present time and two not now in it, one emeritus) are remarkably accurately presented.

Looking from the left to the right of the picture we see the Emeritus Professor of Obstetrics and Gynecology, next the Professor of Surgery, who thinks he should operate at once, next the Professor of Physical Diagnosis, who has nothing to say as yet, next the Professor of the Principles and Practice of Medicine, his index finger pointing in characteristic lecturing attitude, naming his favorite combination for cardiac failure, next is the Professor of Surgical Anatomy and Clinical Surgery, just called from his lecture on surgery of the extremities; the next is the Professor of Therapeutics proposing antitoxin; next is the Professor of Psychiatry and Neurology who thinks his head needs attention; next is the Professor of Forensic Medicine; next is the Professor of Chemistry, who in part coincides with the Alienist; finally the patient on a stretcher who, apparently recovering, bewildered, from his prostration and hearing, in a confused way, the various suggestions concerning him, has nothing himself to say, but is probably wondering if he will get out of his unfortunate predicament alive.

MORAL: Out of a multitude of over prolonged medical council may confusion, rather than wisdom come and in the meantime the patient escape alive or be captured by the undertaker. The name of the ingenious artist appears on the picture.

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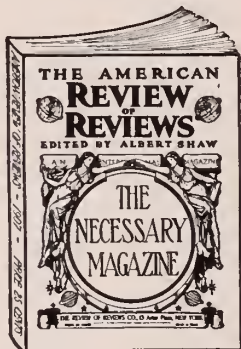
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AN ARTICLE TO READ.—In our contemporary, "*The Ladies' Home Journal*," for April, appears an article by the famous Philadelphia surgeon, W. W. Keen, which ought to be read by every one. In the March number of the same publication appeared an essay by a clergyman named Dr. Tomkins, filled with ethics, and with such marvelous statements as "through the centuries of civilization mortality has not really been decreased in the world, nor has man's span of life been lengthened." The clergyman's arguments were what he would call moral. They may be illustrated by his statement that "vivisection tends to weaken character, and dulls the sensibilities to the pain of others." Any one who knows leading men in this profession realizes that for a man to spend his life studying how to reduce the suffering of humanity has the opposite effect from hardening his character or weakening it. On the other hand, Dr. Tomkins and his anti-experiment friends, if not blunted to human suffering, are at least blinded to the causes of it, and, if they had their way, women would be dying all over the land from puerperal fever, children would be dying needlessly from diphtheria, needlessly from cerebrospinal meningitis, and the hope that is almost within our reach, that the recent dreadful epidemics of infantile palsy may be checked, and possibly the disease diminished or obliterated, would be dashed. If we are to argue about deterioration of character, how shall we say the character of woman is being affected by the fierce epithets they are hurling against the advocates of research? A recent pamphlet, widely circulated by the Antivivisection Society against the Rockefeller Institute, has for its title "Hell at Close Range." It was written by a woman. A well-known doctor of our acquaintance recently received a letter which opened with the address "You Fiend!" Dr. Tomkins, wrestling with the problem of why, since we may not use animals for knowledge, we may slay them for food, "for the support of life by means which God has provided," has a good deal of trouble. It would be interesting to ask any of these people whether the diminution of human suffering from disease, and the prevention of death on such an enormous scale as has been furnished by experiment on

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animals, is not "the support of life by means which God has provided." Dr. Tomkins, like nearly all of his companions in this crusade, ignores anesthetics, and ignores the fact that ninety-seven per cent of the so-called vivisections are merely hypodermic injections. Dr. Keen's article is one of the best on the subject. Those who read it will not be dealing with dull figures. They will realize the difference between a doomed child in the throes of diphtheria, clutching at its throat, gasping vainly for breath, while its mother flings herself on the floor at the doctor's feet in agony, and a child to-day who, with the same disease, properly treated, is sick a few days and faces a mortality rate of less than two per cent.—*Collier's*.

AN IMPORTANT UTERO-OVARIAN SEDATIVE, ANODYNE AND TONIC.—While it is unquestionably true that many cases of pelvic diseases in women are amenable only to surgical treatment, it is quite evident that there are not a few in which, for some reason or other, operative measures are out of the question. Among these may be included the many cases of dysmenorrhea and ovarian hyperesthesia, for the relief of which recourse is too frequently had by the patients to alcohol, the narcotics, or some of the much-vaunted nostrums on the market.

It has been shown to be a mistake to suppose that substantial and lasting benefit cannot be obtained in these ailments by the internal administration of therapeutic agents, a number of which have been thoroughly tried, with results often satisfactory, sometimes brilliant. An agent of undoubted value in such cases is Liquor Sedans, a preparation introduced to the medical profession many years ago by Messrs. Parke, Davis & Co. and esteemed and prescribed by physicians to an extent, it is believed, not equaled by any similar compound.

Liquor Sedans is composed of three of the most important sedatives, anodynes and tonics to the female reproductive tract—namely, black haw, hydrastis and Jamaica dogwood—so combined with aromatics as to constitute a very acceptable preparation, being in this respect unlike



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modern, carefully conducted home sanitarium, with spacious surroundings, and attractive drives and walks. Electro- and Hydro-therapeutic advantages are unexcelled. Trained nurses, hot water heat, electric lights. Special rates to physicians. For reprints from Medical Journals and full details of treatment, address

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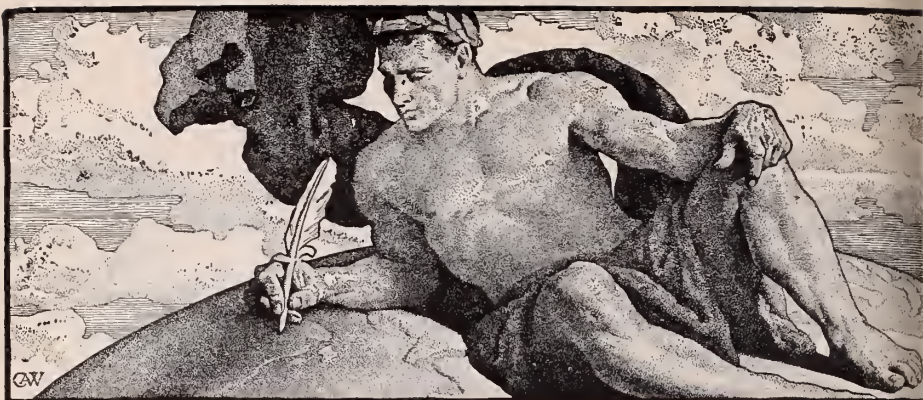
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PANAMA SANITATION REPORTS AGAIN PUBLISHED.—In *The Journal*, Dec. 11, 1909, we commented on the fact that the monthly publication and distribution of the Reports of the Department of Sanitation of the Isthmian Canal Commission were eagerly looked for and carefully read by sanitarians all over the country and that their discontinuance in March, 1909, was unfortunate. We have now to announce that the reports are again being issued and that the back numbers from April to December, 1909, have been published and are available for reference, and may be obtained from the government printer. As we stated before, these reports are of importance not only in regard to canal sanitation but in regard to the management of diseases in the tropics generally.

We are glad to get these reports, they never ought to have been suppressed. The profession submits too often to non-medical authority. It is unwise, unscientific, unsanitary and in every way against the welfare of the army, navy, District of Columbia and the people generally to have lawful medical authority interfered with by non-medical officers.

Such interference is generally the product of profound egotism or partial knowledge, the outcome of which is usually more or less disastrous to the interests medicine should serve untrammelled.

Apropos of the above and of the necessity of a Depart-



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ment of Public Health, let us read the following anent the subject in a medical journal editorial regarding Senator Owen:

"Senator Owen made some statements which tend to impeach the Department of the Treasury as a competent administrator of the health interests of the country. He stated that when he applied to the Surgeon-General of the Public Health and Marine-Hospital Service for certain information, he, a senator of the United States, could not get the information for two weeks or until the Secretary of the Treasury had returned to Washington. When the Surgeon-General finally made a statement to Senator Owen it was by express permission of the Assistant Secretary of the Treasury. This is an illustration of the humiliating status of our national health service under the existing system. It is true that until recently the Public Health and Marine-Hospital Service has been more distinctly autonomous than would seem to be indicated by the two foregoing incidents, but it was only by tolerance and not because the Secretary of the Treasury did not have the power at any time to subordinate that service by executive order."

A HOME FOR FEEBLE-MINDED GIRLS. To the Editor of *The Hospital*.—SIR: Every year newspapers teem with figures demonstrating the increase of feeble-mindedness, lunacy, and the crimes resulting from these causes; yet the public look on at this rising flood of degeneracy without attempting to avert it.

"If there is a positive increase in the numbers of the feeble-minded and of lunatics," says Professor Clifford Allbutt, "it is because we are doing our best to breed them." Is the nation becoming so effete that its individual members can do nothing to end such conditions? If so, it is not surprising that feeble-mindedness increases.

We appeal to all who can appreciate the seriousness of the problem to help us to grapple with it. Feeble-mindedness is largely hereditary, and it is therefore one of the most preventable of diseases, provided only that those afflicted, while being kindly treated and well cared for, can be kept apart from the world. For this reason, the Association has

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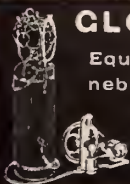
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founded a farm colony of 170 acres near Tonbridge, where, by the care and control of the feeble-minded, one of the most subtle evils which has ever attacked national life is being successfully combated. The colony is named after the Princess Christian, and she will herself open it on June 3 next. Already there is established a home for lads of sixteen to twenty-three: these lads in some cases a source of danger to all around them, are now busily and happily employed in tending the live stock which kind sympathizers have already given, and in other colony work.—*Abstract from The Hospital Letter Box.*

THE ALCOHOLIC PROBLEM.—The editorial department of Dr. Daniel's "Redback" Texas Medical contains a pointed reference to the part taken by Congress on this subject of which the following is in part an abstract:

The most hopeful sign of the times is the fact that the United States government is awakening to the importance—economically and otherwise—of dealing with the most destructive evil of our civilization, the indiscriminate sale and use of that most deadly narcotic poison—alcohol. For the first time has Congress consented to listen to reason on the subject, to earnestly heed the voice of science in its showing that alcohol strikes at the fundamental interest of society and is ruinous to the public health and morals—sapping the foundations of our social fabric. The papers read at the March meeting of the American Society for the Study of Alcohol were submitted to Congress, and the Senate was so impressed with them and the deductions therefrom that they were ordered printed and distributed at government expense. This leads to the hope that soon effective legislation will be enacted that will materially lessen if it does not remove the evil of drunkenness. These papers were submitted by some of the ablest and most distinguished biologists, pathologists and psychiatrists in America—men who for years have made a deep laboratory study of the effects of alcohol on man. Amongst the contributors are Kellogg, Hughes, Berkeley, Crothers, W. S. Hall, Howard Kelley (Johns Hopkins), Marcy and numerous others—acknowledged authorities. The pub-

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lication, "Document 48, United States Senate," is one of the greatest interest and importance, and every physician who feels any concern for his country or who has any sympathy for the poor, deluded, ignorant people who poison themselves with the sanction of the law should read it and especially study the conclusions of these scientific men. A copy can be had free, on request, from any of the Senators.

NATIONAL EFFICIENCY.—Since the greatest of our national assets is the health and vigor of the American people, our efficiency must depend on national vitality even more than on the resources of the minerals, lands, forests and waters.

The average length of human life in different countries varies from less than twenty-five to more than fifty years. This span of life is increasing wherever sanitary science and preventive medicine are applied. It may be greatly extended.

Our annual mortality from tuberculosis is about 150,000. Stopping three-fourths of the loss of life from this cause, and from typhoid and other prevalent and preventable diseases would increase our average length of life over fifteen years.

There are constantly about 3,000,000 persons seriously ill in the United States of whom 500,000 are consumptives. More than half this illness is preventable.

If we count the value of each life lost at only \$1700, and reckon the average earning lost by illness at \$700 per year for grown men, we find that the economic gain from mitigation of preventable disease in the United States would exceed \$1,500,000,000 a year. In addition we would decrease suffering and increase happiness and contentment among the people. This gain, or the lengthening and strengthening of life which it measures, can be secured through medical investigation and practice, school and factory hygiene, restriction of labor by women and children, the education of the people in both public and private hygiene, and through improving the efficiency of our health service—municipal, State and National. The National



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government has now several agencies exercising health functions which only need to be concentrated to become co-ordinated parts of a greater health service worthy of the nation.—*From the Report of the National Conservation Commission.*

COLON AND SEMICOLON.—*The Louisville Courier-Journal* says: Doctor John Young Brown, a former Kentuckian, now an eminent surgeon in St. Louis, told the Ohio Valley Medical Association at Evansville that he believed the large colon in man, with the exception of its lower portion, was a useless organ. He believed, he added, that many of the toxæmias were due to defective colon mechanics and predicted that many conditions now considered medical would be transferred to the surgical column and relieved by operations.

Doctor Brown cited a series of cases where he had deliberately eliminated the useless colon. He also presented a patient whose colon had been out of commission for three years. This patient, the newspaper accounts of the incident say, is enjoying the best of health and is "a marvelous exhibition of the skill of modern surgery.

In the language of the colored apostle, "the world do move." Eminent surgeons are teaching us a good many things about the human interior that up to a few years ago were hardly dreamed of, even in medical philosophy.

Doctor Brown would puncture the intestinal autonomy. More than that, he would punctuate it and erasing the colon, would substitute the semicolon. In toxæmic ailments of the colon he not only would "throw physic to the dogs," but would throw the colon after it. All hail the semicolon, perfected successor of the colon that shortly may be a reminiscence!

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Say! can that one be I?
Merry of soul I sailed all day
Ne'er asking where or why.

Music, home, friends, happiness,
Pleasure! I can't tell how,
The glory of youth glowed in my soul,
But where is that glory now?

Billow and breeze, islands and seas,
Mountains and rain and sun;
All that was fair, all that was good,
All that was me, is gone.

Give me again all that was there,
Give me the sun that shone,
Give me the eyes, give me the soul,
Give me the mind life gone.

This patient is a virgin of twenty-seven, small of stature, but of most symmetrical head, body and limbs and of good intellect and extraordinary instrumental musical ability. She is bodily free from physical defect.

Several months ago the above was written. This patient has recovered and now talks of herself, as she was, rationally, as patients once mentally afflicted do rationally after completed recovery. During convalescence she asked for advice frequently as to how to avoid the storms to which she was accustomed and helped in the remedy. She also speaks well of the medical care and personal attention received when the cloud was over her mind.—Editor.

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ment and large student body, is below the standard of a university and is a mere college, whose professors are not eligible to receive Carnegie pensions. Apparently the Carnegie pension is to go only to the professors of those large and prosperous institutions which are the best able to pay them good salaries while they work, and who, inferentially, need the pension the least. The small college is doing the best work in turning out useful and moral citizens. The professors who spend their lives in them are more in need of pensions—and as a class more deserving than those who reach the higher positions and better pay of the large institutions. —*St. Louis Star.*

We found the library of this university to possess a book we could not find in others farther east and the institution is quite sufficiently equipped for imparting a good education in its several departments. May be it is located too far West for eastern appreciation.

A FOOLISH MOTHER.—St. Petersburg, March 19.—A horrible example“of the low intellectual development of the people of Siberia is mentioned by the *Siberian Press*. In the village of Bodaibo, in the Baikal territory, a woman who had to go to the village shop said to a child: “Look after the baby and see it does not cry.”

“But if it does cry, what shall I do?” asked the child.

“Oh, then you must cut its tongue out,” answered the mother with a careless laugh.

When the mother returned she asked: “Well, did baby cry?”

“Yes,” said the child.

“And what did you do?”

“Oh, I cut its tongue out, and that stopped the crying.”

The mother rushed to the cradle and found the child had bled to death, the tongue and a pair of seissors lying on the counterpane. In her grief the mother seized the child, who had taken her words so seriously, and dashed his head against the wall so violently that she killed him, and then she went outside and hanged herself.

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The States of Alabama, Kansas, Oregon, New Jersey, the Province of New Brunswick, Pennsylvania, Delaware and Connecticut have already appeared. Those of Rhode Island, Minnesota, Ohio, Massachusetts, Maine, Michigan and North Carolina will shortly follow and be continued until all the States and Provinces are published.

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MR. O. WADDINGTON appears in a recent issue of *The Chemist and Druggist* on the chemist and druggist, from which we quote the following excerpts: "It is the tragic writer who has paid most attention to the members of our craft. True, it is almost always cupboard love that he has shown us—if there is an apothecary introduced into a work of fiction you may be sure that the author has an eye on his poison cupboard, and sooner or later it will mean more work for the coroner. But these chemists of romance usually exhibit small concern for the coroner. There is a typical instance in Stephen Phillips's 'Paolo and Francesca,' where the old apothecary says:

'I will not sell to murder,
But unto any weary of their life
I sell a painless issue out of it.'

Scarcely a workable principle nowadays! This poison-selling specialist is more or less of a stock figure in romance. He is usually depicted as a man well on in years and addicted to miserliness. The ranks of pharmacy are not lacking in pessimists nowadays, but they have not seen nor imagined anything so wretched as the apothecary in 'Romeo and Juliet.'"—*The Hospital*.

A MAN DOWN IN MISSISSIPPI, we are told in press dispatches, true to his vow to his wife,—who was opposed to the use of drugs,—never to mention medicine to her or call a doctor, saw her die in great agony and refused to break his vow or allow his neighbors to administer even a potion to soothe her dying moments, or, mayhap, save her life. * * *

Some day, not far in the purple distance, when the light of modern medicine has filtered through the mind of man, says the journal, the responsibility of the individual in respect of the health and lives of his fellow-beings will compel an accounting to the courts for inaction in the presence of sickness and death from preventable causes.—*Journal Mo. State Medical Association*.

The State Journal thinks this vow should have been broken. The neighbors should have forced its fracture and had the foolish monster arraigned for participation in murder.

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TO MAKE NEGROES WHITE—DR. SIMPSON'S IDEA.—*The Pacific Medical Journal* thus refers to this gentleman's lecture before the Association for the Advancement of Science.

"By experiments with plants and animals, we have learned much of the so-called law of heredity, and in doing so we have come to know a great deal of the nature of the chromosomes, or unit of life, which gives color. We are very close * * * to gaining complete control over these chromosomes, and that means controlling color.

"I have no doubt that before long it will be possible to treat a living creature, either by injections or by baths, so that the chromosomes in the cells of the creature will be attenuated or destroyed."

HYPOPHOSPHITES HAVE SUSTAINED A HIGH REPUTATION in America and Europe for efficiency in the treatment of nervous disorders as the following letter will show:

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A MEDICAL MARTYR TO BE REWARDED.—John R. Kissinger, of South Bend, Ind., has had his pension increased from \$24 a month to \$125 by Congress.

Kissinger sacrificed his health in the interest of science by permitting medical officers of the army to use him as a subject for experiments to prove that yellow fever was carried by certain kinds of mosquitoes. It was at the time when the yellow fever experts, after the Spanish War, were trying to make the island of Cuba more healthful and to eradicate, as far as possible, the yellow fever that had worked such havoc in the army. Kissinger contracted the yellow fever and is still suffering from it.

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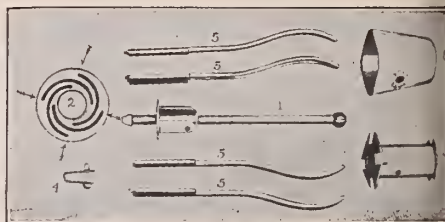
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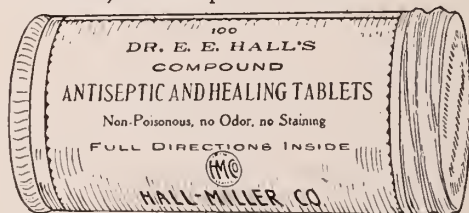
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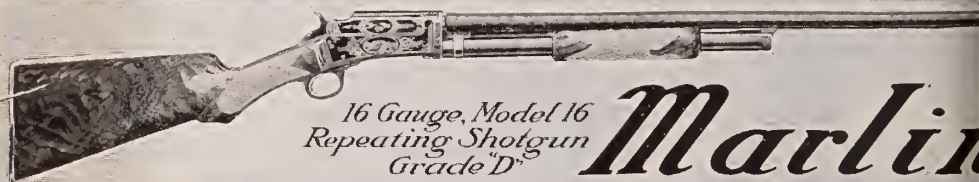
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BUREAU OF PUBLIC HEALTH.—For some years past the establishment of a department of health, to be presided over by a cabinet officer, has been advocated by a large number of prominent medical men. It is the opinion of many sanitarians and others who have given the subject much thought, that our present methods of supervision of the public health are inadequate, and that enlarged powers should be conferred upon a single administrative officer who should be a member of the President's official family.—*Buffalo Med. Jour.*

AN EXCELLENT IDEA.—*The Medical Herald* thus characterizes the following: A proposition is to be presented to the Iowa State Medical Society at its May meeting, recommending that the present State Board of Health be abolished and in its place be adopted the system of an appointed health commissioner and advisory board. The purpose of the change is to remove health matters from politics.

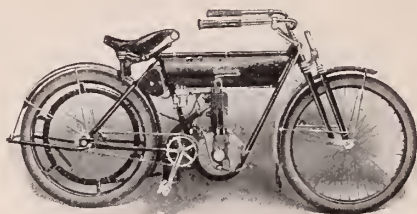
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A LAWYER IN AN OMAHA RESTAURANT: Waiter: "I have deviled kidneys, pigs' feet and calves' brains." "Have you?" said the lawyer. "I have troubles of my own. No tale of woe for me. Give me something to eat."

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THE ALIENIST AND NEUROLOGIST

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A MEDICO-LEGAL PHASE OF AUTO-EROTISM IN WOMEN.

BY JAS. G. KIERNAN, M. D.

Chicago, Ill.

ON the psychic side, remarks Havelock Ellis, no doubt,¹ the most frequent and the most characteristic result of persistent and excessive masturbation is a morbid heightening of self-consciousness without any co-ordinated heightening of self-esteem. The man or woman who is kissed by a desirable and desired person of the opposite sex feels a satisfying sense of pride and elation, which must always be absent from the manifestations of auto-erotic activity. This must be so, even apart from the masturbator's consciousness of the general social attitude toward his practices and his dread of detection, for that may also exist as regards normal coitus without any corresponding psychic effects. The masturbator, if his practice be habitual, is thus compelled to cultivate an artificial consciousness of self-esteem, and may show a tendency to mental arrogance. Self-righteousness and religiosity constitute, as it were, a protection against the tendency to remorse. A morbid mental soil is, of course, required for the full development of these characteristics. The habitual male masturbator, it

1. Psychology of Sex, Auto Erotism.

must be remembered, is often a shy and solitary person; individuals of this temperament are especially predisposed to excesses in all the manifestations of auto-erotism, while the yielding to such tendencies increases the reserve and the horror of society, at the same time producing a certain suspicion of others. The habitual female masturbator, on the other hand, is often abnormally deficient in feminine shyness."

In many cases masturbation, when practiced in excess before the age of puberty, has led, more especially in women, to an aversion for normal coitus in later life. In such cases some peripheral irritation or abnormal mental stimulus trains the physical sexual organs to respond to an appeal which has nothing whatever to do with the fascination normally exerted by the opposite sex. At puberty, however, the claim of passion and the real charm of sex begins to make itself felt, but owing to the physical sexual feelings having been trained into a foreign channel, these new and more normal sex associations remain of a purely ideal and emotional character, without the strong sensual impulses by which, under healthy conditions, they tend to be more and more associated as puberty passes on into adolescence or mature adult life. In many women, often highly intellectual women, precocious excess in masturbation has been a main cause, not necessarily the sole efficient cause, in producing a divorce in later life between the physical sensuous impulses and the ideal emotion. The sensuous impulse having been evolved and perverted before the manifestation of the higher emotion, the two groups of feelings have become divorced for the whole of life. This is a common source of much personal misery and family unhappiness, though at the same time the clash of contending impulses may lead to great ostentation of moral character. When early masturbation is a factor in producing sexual inversion it usually operates in the manner Ellis has here indicated, the repulsion for normal coitus helping to furnish a soil on which the inverted impulse may develop unimpeded.

Some years ago I pointed out the psychical *modus oper-*

andi of this.² The victim of puberty stress suffers from undue exaltation of the conscious ego, with resultant introspective tendencies, abulia and nosophobia. Abulia and nosophobia lead to an unstable ego and since sex conceptions are at the outset not always clearly demarcated to uncertainty as to the type of sex attractions. If an imperative conception occur in an otherwise healthy mind, the conception may disappear with improved health. In certain ego instabilities, conceptions of a parasitic ego may develop, and later the parasitic ego may, as I have elsewhere pointed out, gain dominance.³

If the chief element of the parasitic ego be sex, then the imperative conception in this direction creates change in sex mental relations. This is fostered by the voluptuary's tendency to auto-erotic imagery in which enjoyment is increased by the performance of both sexual parts by himself. The sex conception latest to rise into consciousness tends to dominate. In this way an acquired type of sex inversion may occur.

In a case under my care, a young woman was brought up in a country town where primitive mixoscopic views of sex relations burgeoned into full luxuriance side by side with obvious parental marital excess and with coarsely humorous views of sex relations. After the usual boarding school course, she passed into an academic college with an atmosphere of conventional religiosity. Here she was initiated into masturbation and enjoyment of mixoscopic female tales of coitus. At ten she had been induced to "play at papa and mamma" by two girls and a boy. These attempts at coitus created only repugnance. Manual masturbation at 16, followed by embraces by her girl friend, produced an intense orgasm initiated by contact with her friend's clitoris, which was quite large. The imagery excited was alternately masculine and feminine. The first, the deepest, most prolonged and most impressive, was succeeded by female only as the sense of her companion's en-

2. American Jour. of Dermatology, July, 1904.

3. Alienist and Neurologist, 1891.

joyment broke into the fading male imagery. Male imagery dominated in the case of her friend. She formed a normal attachment some years after her graduation as A. B., standing comparatively high in her class. Her lover was a victim of adolescent stress, a nosophobiatic and sexual neurasthenic. Believing himself impotent he, after a couple of experiences of sexual failure with other women, broke off the engagement. During the engagement there had been much erethism in which the male imagery completely crowded out the former female. After breaking of the engagement, the female element tended to dominate in sexual imagery, produced by masturbatory procedure. The one which she adopted was like that described by J. H. Pryor¹ and C. E. Warren?²

The patient knelt before a chair, let her elbows drop on its seat, grasping the arms with a firm grip, she commenced a swinging, writhing motion, seeming to fix her pelvis and moving her trunk and limbs for a moment. The muscles were rigid, her face took on a passionate expression; the features were contorted, the eyes rolled, the teeth set and the lips compressed, while the cheeks were purple. The condition bore a striking resemblance to the passional stage of grand hysteria. The reveling took only a moment to commence but lasted a long time. Swaying induced a pleasurable sensation, accompanied with a feeling of suction upon the clitoris. Almost immediately after, a sensation of bursting, caused by discharge from the vulvo-vaginal glands, occurs, followed by a rapture prolonged for an indefinite time. The male and female imagery is at times so visualized as almost to become hallucinatory. In a similar instance which came under my observation at the Cook County Insane Hospital, there was a multiple imagery of several successive copulations. This had succeeded her husband's death, and was followed by marked exhaustion and depression. For an attempt at suicide, caused by this depression, the patient had been committed to the insane hospital, there making a good recovery. The female element of the imagery in the case of the patient first described grew more dominant.

1. Buffalo Med. Jour., 1883.

2. St. Louis Med. and Surg. Jour., 1891.

Latterly the imagery circled around plump women who appeared to be herself, but at the same time with whom as a male she copulated. The element of disgust in regard to the lover had created a sense of repugnance toward men. This, however, the patient regarded as abnormal, believing herself to be what she called unsexed. Breaking of the engagement threw her into a marked auto-toxic neurasthenic state from which she made a very good recovery, under the rest treatment, accompanied with an intellectual training in science, literature and sociology from the evolutionary standpoint.

In this case the potentialities of sex transformation were great, yet such potentialities were dominated by healthy conceptions and crushed back into the subconscious. In another case, a male, the mental state was identical. The ordinary psychic impotence was dominated by the conceptions recognized as morbid, that the individual had undergone a mental transformation as to sex. As this conception tended to excite an orgasm it was rapidly assuming the form of an embryonic parasitic ego. The control of the erethism by camphor-monobromate and conium, made this conception occur less frequently, and in this way the normal conception overbalanced it. In another case a point was reached where the victim of the parasitic ego became uncertain as to which conception was the more healthy. The sex transformation idea was not dominant, unless the subject were in ill-health or laboring under mental strain, when it seemed to arise in consciousness with considerable force. Beside these types others have come under observation where the condition was merely an obsession fully controllable by suggestion, even without hypnotism. It is probably this type of cases which are so often described as sexual inversion, cured by hypnotism. Cases where the obsession has passed into the delusion of sex transformation and where a reversal of the process occurred at the climacteric have been noted by many observers. Conceptions of sex change of "fear" type, like other nosophobias, (fears of disease), are exceedingly common among adolescents who have received the conventional training as to sex matters.

The mechanism whereby disappointment in normal

love becomes a factor in the production of sexual inversion is, in my judgment, similar to that just described. If this disappointment should produce, as it often does, a shock causing nervous prostration, the stability of the "ego" would be upset and the foundation laid for the creation of a parasitic "ego." If, at the same time, the circumstances of the disappointment were such as to create a belief in the worthlessness of the woman so intense as to threaten belief in all women, a repugnance would be created which would materially aid in development of the parasitic ego. A factor of this kind appears in the female case first described. The value of the present observations lies in their diagnostic bearing on therapeutics. If the case be one of congenital defect, showing itself at the periods of involution, dentition, puberty, etc., nothing can be done. If, however, the case be one of instability, a great deal can be done by removing the nervous adynamia. Some years ago I reported cases of sexual nosophobiacs who had formed the notion that they were incipient sexual inverters despite normal coitus and excitation by female images. The mental state here was the usual neurasthenic state in which uncertainty and abulia led the latest conception to dominate. It is this class in particular which has found pabulum for nosophobic gloating in invert notions. These states are in many instances decidedly controllable by "auto-suggestion," aided by the ordinary treatment for neurasthenia. This "auto-suggestion" is best secured by demonstrating that the mental state is considerably under the patient's control and that inattention to hygienic and therapeutic details tends to diminish this control. In certain males and females at the age between 45 and 60, impulses toward inverted and perverted sexuality occur. These are treatable by suggestions of the type just described, so that the perversion as well as the erotic excesses are kept under control. Insistence on the morbidity of the pervert ideas and prohibition of sexual literature as in the sexual neurasthenic, together with allied psychic therapy and anaphrodisiac procedures decidedly benefit. These patients, like the hysteric, will not "will" to be cured while they are subjects of sympathy.

This point has not wholly escaped previous observers, though they do not seem to have noted its psychological mechanism. Tissot stated that masturbation causes an aversion to marriage. More recently, Liman³ considered that masturbation in women, leading to a perversion of sexual feeling, including inability to find satisfaction in coitus, affects the associated centers. Smith Baker,⁴ ("The Neuro-physical Element in Conjugal Aversion,") finds that a "source of marital aversion seems to lie in the fact that substitution of mechanical and iniquitous excitations affords more thorough satisfaction than the mutual legitimate ones do," and gives cases in point. Savill, also, who regards masturbation as more common in women than is usually supposed, regards dyspareunia, or pain in coition, as one of the signs of the habit.

The dissociation of the aim of the habit from the aim of coitus with the resultant self esteem and ostentatious prudery are singularly well illustrated in a case reported by R. T. Morris,⁵ of New York, "in a devout church member, who had never allowed herself to entertain sexual thoughts referring to men, but she masturbated every morning when standing before the mirror, by rubbing against a key in the bureau drawer. A man never excited her passions, but the sight of a key in any bureau drawer aroused erotic desires."

E. C. Spitzka,⁶ about a quarter of a century ago pointed out that, in female masturbators, while there is a remarkable dullness of the normal emotions, there is often an affectation of a high moral tone aggressively urged, a tendency to denounce normal sexual indulgence and to suspect the sexual purity of others. These characteristics crop up so frequently in leaders of social purity movements and the spinster denouncers of "that horrid man" that it is not surprising to find the case reported by Havelock Ellis of a social purity leader who at the acme of her propaganda found she had been addicted to masturbation. Medico-legally these women are a social danger. They not only cause marital incom-

3. *Therap. Mntshfte*, April, 1890.

4. *Jour. of Nerv. and Ment. Dis.*, 1892.

5. *Transactions of Amer. Assoc. of Obstet.*, 1892.

6. *Jour. of Mental Science*, 1887.

patibility in their spouses, but their ostentatious suspicion of their neighbors' sexual purity tends to break up other families. In a case about which I was consulted the woman refused the marital embrace as a "dirty trick," set her sisters and brother-in-laws by the ears through her accusations and scandal mongering and was the cause of church and neighborhood quarrels by her insinuations against the purity of other women. Her husband, refused coitus and nagged beyond endurance for his "coarse brutal instincts," instituted divorce proceedings. Her great intimacy with a young boy aroused suspicions, but the ostentatious refusal of marital coitus, for a time quelled these. Finally the compatibility of a boy fetichism with refusal of marital coitus was pointed out and investigation resulted in the following confession:

"For many years Mrs. ——— and I were neighbors. I lived with my parents and she lived with her husband nearby. She and my mother were intimate friends and exchanged calls frequently. Mrs. ——— from the beginning manifested a great passion for me and seemed to find a rapturous delight in kissing, embracing and caressing me. It seemed very strange to me and I could not understand it as I was only between eleven and twelve years of age and perfectly innocent. She made me many presents and gave me many delicacies to eat so as to induce me to visit her at her home. She seemed always to prefer to have me with her alone. When we were thus alone she would place me between her limbs and would rub me up and down against her person in a most amorous manner and then would stop from time to time and kiss me again and again most fervently. She gave me a delightful sensation which I cannot describe and did not understand, but I came many times to her to be thus fondled and caressed.

"One afternoon, when I was about twelve she invited me to her house for the purpose of accompanying her to the theatre, and while we were there alone she caressed me in her usual way and then invited me into her bedroom, laid down upon the bed, raised her clothes, put me in between her legs, took my penis in her hand, put it in her person and taught

me to have sexual intercourse with her. I had a pleasant feeling but no emission. After this these experiences were frequent and repeated. These occurrences happened at her home in Chicago or her summer resort at Lake Geneva. I did not have an emission until after a year or more from the time we began these practices. Since I have had emissions I have enjoyed relations with her immensely and she has always put cotton in her vagina to avoid pregnancy.

"Within the last year my conscience has reproached me and I have realized that I have been doing very wrong. I have considered many plans for escaping from the wiles of this woman, and have even gone so far as to contemplate suicide, but she has been so persistent I could not resist her.

"I sat on the same couch with her in the evening in our night apparel after the daughter had gone to sleep and submitted to her kisses and embraces, I have also permitted her to gratify her passion for me by kissing, caressing and embracing in the woods about her resort at Lake Geneva."

Her explanation was that as the boy was a virgin and innocent, coitus with him did not have coarse, sinful aspects; he was not the leavings of other women. Divorce was granted on the ground of cruelty to the husband after the confession had been produced in evidence and read by the judge.

Much of the so-called social purity movement is marred by the presence of auto-erotists of various forms ranging from masturbators and exhibitionists to invert and perverts among its leaders. One such leader who consulted me, not for inversion which she regarded as normal and beautiful, but for occasional obsessions of psychic hermaphroditism which she regarded as disgusting and abnormal since they awakened desire for the normal relations between the sexes, could not, except with difficulty, be brought to see that her seduction of girls was as bad by her or even worse than it would have been by men. Of the consequences of the girl seduction by this class of women, Belot has drawn a rather nosologically overstrained picture¹ of the evil effects of training by the prurient prudes who result from mixoscopic

¹Mlle. Giraud, *Ma Fenine*.

auto-erotism either with or without mechanical manipulation. Dolfe Wylliarde¹ and Hubert Wales² have pictured two different results. In one a woman retarded sexually by prurient prudery separates from her husband to drift back to perfect union with him through an awakening of the normal sexual phase of romantic love. In the second, a woman trained in mixoscopic conceptions of coitus by a pruriently prudish mother of the auto-erotic type, is shocked by the normally healthy sexual approaches of a good husband but ultimately has her sexual appetite awakened by a selfish, narrow, conventional roué to whom she falls a victim and by whom she is deserted when pregnant. The sexual obsession of the shock of her first relations with her husband and the obsession of the roué prevent her from accepting the forgiveness of her husband and returning to him. The social mischief done by these female auto-erotists, especially that done in the name of social purity, is enormous. Much marital incompatibility is due either directly to such auto-erotism of "purity," or results from the influence of the auto-erotist on other women as in the forensic case cited.

1. Mafoota.

2. Hilary Johnson.

APHASIA AND OTHER DISORDERS OF SPEECH.

BY TOM A. WILLIAMS, M. B., C. M. (Edin.,)

Washington, D. C.,

Memb. Corresp. Soc. de Psychol. de Paris, Neurologist to
Ephiphany Free Dispensary, etc.*

Dysarthria, Aphemia, Aprascia, Idioglossia, Amnesia
with Cases, Prognosis, Diagnosis and Treatment.

THE term *aphasia* is often so erroneously applied that it is not out of place to discuss some of the disorders of speech often thus misnamed; for there is the greatest therapeutic importance in knowing whether a speech disorder is (1) a permanent organic defect, congenital or acquired, or whether it is (2) a functional disability due to intoxication, oedema or (3) arising purely from a vicious habit or fixed-idea. A resumé of modern knowledge of this subject is the more useful in that the paper of Pierre Marie,¹ of Paris, gave to many the impression that the classical views of aphasia were false; and those who have not examined the question are unaware of the fact that the further studies² incited by Marie's article have established more firmly than ever the regional classification of aphasia.

It will be recollected that Marie denied the occurrence of *aphemia* in any form, by which term we denote the inability to utter words although all the muscular movements for doing so can be managed when words are not in question. It is supposed that the *kinesthetic* images are unavailable either by destruction of their centre, the left third frontal convolution, or by interruption of the path connecting this centre with the psycho-motor area concerned with moving the

*A clinical lecture before the Washington Medical Society.

muscles of speech. Marie termed the loss of utterance *anarthria*, that is absence of power to articulate, a most misleading application of a term always used in quite a different clinical sense; for it is applied only to cases which also show disability of the muscles to normally perform other acts as well as that of speech. This is clearly illustrated by the patient now shown.

Anarthria.—In her there was a gradual loss of clearness in the utterance of words and in the modulation of sounds; until now she is utterly unable to articulate a single word or to make any but the most elementary sound, in which it is easy to hear that the vocal cords are quite passive. She is truly anarthric; because as you observe, her tongue is almost completely paralyzed; the palate is highly paretic, as is the pharynx; for she is unable to swallow solids at all, and liquids are taken only with difficulty and sometimes flow through the glottis. There is also a slight paresis of the lower facial and jaw muscles, with a tendency to dribbling of saliva. But she is not an aphasic; could the muscles move, she could utter the words she wants, of which she has a perfectly clear notion, just as she has of the act of swallowing although she cannot perform it. Her disability is caused by the very rare condition, the partial necrosis of the homologous areas of the two hemispheres which bi-laterally govern the movements of the tongue, larynx, pharynx, palate and lower part of the face. So far as I know, this case is unique, for no other areas are implicated.

Dysarthria is the condition heard in bulbar paralysis. It is there accompanied by atrophy of the muscles of articulation; but *pseudo bulbar paralysis* resembles the case I have shown; for there is no muscular atrophy, but only an upper-neurone paralysis, arising however from infracortical lesions which are usually multiple and proceed from arterial sclerosis.

The cases of *aphemia* where the third frontal appeared intact are explained by serial sections, which show that there is an interruption in the white fibres of the centrum ovale between F 3 and the temporal lobe (Mahaim, Congress of Geneva). The same observer reported two cases without

motor aphasia in which the posterior two thirds of the insula were destroyed.

That the so-called lenticular zone of Marie has nothing to do with *aphemia* is shown by ten cases which Compté³ cut in series, in which the lenticular nucleus was free from necrosis, although small areas of destruction of the internal capsule had produced the dysarthria of pseudo-bulbar palsy.

When an aphasia is partial, it is usual for the substantives to disappear before verbs and adjectives, more especially in cases of cerebral tumors of the speech zone. The most likely explanation of this is that most substantives are used less often than the common verbs and adjectives. Besides, it would seem by their use by primitive peoples that the verb and adjective are more deeply rooted in speech, as they are acquired first.

The inability to pronounce certain consonants or speaking in a nasal voice may be a congenital defect or fault of training, but the nasal and thick voice quite often occur in the course of a *poly-neuritis* from degeneration of the nerves to the palate. The prognosis in this case is quite good as a rule.

Idioglossia.—The most important element in the prognosis of *dysarticulosis of childhood* is the perseverance and intelligence of the mother and nurse. This is illustrated by a musician's child aged four and a half who was under my care in Paris on account of almost unintelligible utterance. I was not sure whether this was entirely due to some congenital defect of the nerve apparatus. Had I given up efforts after the mother had failed in two weeks to produce the least improvement, the former diagnosis might have been too quickly acquiesced in. But as I was pretty sure that training could overcome at least part of the disability, the father was urged to take the child in hand; and his efforts, seconded by those of the mother, completed a cure in four months.

We may pass now to the *treatment of motor aphasia*. The chief difficulty to conquer is the annoyance and loss of mental balance the patient feels in not being able to perform the habitual automatic action of speaking. Thus,

psychotherapy becomes an important element of the training. A child is accustomed to being controlled and compelled to do things which he dislikes in the acquisition of arts. But it is very difficult for an adult to turn his energies into new activities. More especially is this the case with the difficult co-ordination required for a new automatic speech apparatus. One of the best methods is the learning of verse and its repetition. Very important is the utilization of the motor images of the lips seen in a mirror, as in the training of deaf-mutes.

The better *prognosis* of aphasia as compared with aphemia is due to the constant re-education the patient's surroundings give. He is assailed all day long with words by hearing or sight, and has to make efforts to comprehend in order to understand his fellows. On the other hand, so difficult are the first words of the aphemic that inertia is apt to get the better of him, and efforts to speak cease to be made. As soon, however, as an improvement begins, each year will bring further gain.

Perhaps the greatest factor in prognosis is the intellectual and moral status of the individual. If the memory is gone, hope is small. If internal language has disappeared as well, the prognosis is bad. Simple methods of testing the internal language are for the patient to indicate the number of syllables in the word representing an object shown him.

In the *diagnosis of aphemia* it is important (1) to exclude dysarthria, (2) To exclude sensory aphasia, that is word-deafness or word blindness, (3) To test the power of mimicry and the repetition of words. Spontaneous mimicry only disappears as intelligence is impaired, (4) To test the singing which is often retained along with the vocalization, which in some people is merely an automatic accompaniment of the music. (5) To test the reading power, which is nearly always at first slightly *alexia*, possibly through the mechanism which Von Monakow has termed *diaschisis*. This may be expressed simply as the interference with the function of one centre on account of the impairment of another centre with which the first is intimately connected physiologi-

cally. (6) Writing with the left hand is sometimes possible, and it may be reversed as in a mirror, and the name can nearly always be signed, though rarely spoken in complete cases.

Differential diagnosis from sensory aphasia is easily effected by the transcription of letters, which is made in a servile fashion and is really a drawing when there is word blindness.

Simulation is detected by its complete mutism; the real aphasic can always utter some sound, and it is characteristic that he makes most violent attempts to speak, while the simulator remains quite calm and makes no sound at all. The pretended mute's mimicry is not defective, and he has no difficulty of comprehension, and is not likely to show *apraxia*, unless he has been very well coached; besides, the true aphemic rarely attempts spontaneously to write with the contralateral hand, while a pretended or hysteric readily does so.

A few words of *apraxia*, of which aphemia is merely a special kind. The term is used to denote an inability to perform an act conceived, and the substitution of some other act, an inability neither due to disorientation, amnesia, aprosexia (lack of attention), paralysis, ataxia nor agnosia (inability to recognize objects felt, smelt, heard and seen.) It is very simply ascertained by demanding such acts as putting out the tongue, touching the ear, raising the leg, etc. Or by the less simple series of acts used in lighting a cigarette, cutting up one's food and the still less simple acts used in dressing oneself, sealing a letter, etc.

The act of putting a cheque in the waste basket and pocketing the envelope is not strictly of the same order; for it is due to *failure of attention*.

Still another form is characterized by a general contraction of all the muscles of the limb concerned in the desired acts, which are less and less well performed as they are more complicated. The order of excellence in Kleist's case was (1) flexion and extension, (2) turning, sitting, arising, (3) going upstairs, standing on one foot, on tip toe, (4) impossible to leap, to draw a circle in air with foot.

The faculty of performing orderly movements, *eupraxia*, is believed to reside in the left third and second convolutions. This centre guides the co-ordinate purposive movement complexes of limbs on both sides. Therefore the corpus callosum must be intact for its action. Its destruction does not seem always to impair the *autokinetisms*, whether these are merely muscular *synergias*, such as the (1) extension of the wrist when the fingers are flexed (2), the dorsi-flexion of the foot when the leg is lifted, (3) the bending of the knees when the trunk is extended backwards, or whether they are certain *habitual movements*, such as (4) walking, (5) shaking hands.

SENSORY APHASIA is really a form either of *amnesia* or of *agnosia*, and as failure of recognition is in reality lack of power to remember either the thing itself or to recall the connections which associate it with other things, amnesia becomes the chief factor in a sensory aphasia of the acquired type.

Agenesia verbalis.—When congenital, moreover, it is failure to fix the memories of words which gives rise to the word blindness which perhaps occurs to a greater or less degree in about two per thousand school children, who never acquire the power of reading with facility as a result of their school training. The powerful stimulus of some interest in after life, however, may call forth the extra effort needed for such defectives to learn to read freely. Thus one of Hinshelwood's cases (*Brit. Med. Jour.* 1907, vol. 11) taught himself to read in four years through his interest in the football reports, over which he poured for four hours every evening in order to follow the game for which he had a passion. Seven years at school had hardly taught him to read a word.

Patients of this type can in reality always be taught to read if placed in a special class where the tactile images are cultivated by the use of blocked letters. It is believed that the defect is due to hereditary insufficiency of the associational area between the visual centre and the word-hearing centre. We do not know whether their training is made possible through the use of the right-side centre or whether it is not accomplished entirely by the association of kinesthetic

images with the sight of the written words, as in the deaf mute.

The condition must be *diagnosed from ocular defects* by (1) the size of the letters making no difference to the reading power of the patient, (2) by the patient's ability to copy the letters, (3) by the fact that figures and some few words and letters are readily recognized. The general mental defect of *imbecility* is excluded by the fact that the child's auditory memory is quite good and that all school tasks except reading are normal.

The same principles of diagnosis and educative treatment may be applied to *adult alexics*; but the prognosis is qualified by the facts mentioned when discussing aphemia, viz. the difficulty of a mature person to recommence the kind of education which every infant performs as a matter of course.

Word deafness may be classified into three degrees. In the most grave, the patient does not know he is listening to speech at all when words are uttered in his presence. In the second, he does not recognize the language; and thirdly in the slightest degree he does not understand the meaning, the extent of this failure may vary from complete want of comprehension to an uncertainty or confusion only in complicated sentences.

The *prognosis* of the latter cases is fairly good when the cause can be suppressed; for it would seem that considerable education of the auditory word-centre in the first temporal convolution is possible; and the patient can hardly help automatically listening to the words of his companions.

As the text-books contain clear and full descriptions of this affection I shall not enlarge, except to point out the distinctions between it and the *functional aphasias and amnesias of psychic origin*. The best way to do this is by the citation of cases recently seen.

The first case, referred by Dr. Bulloch, is an example of aphasic amnesia of organic cause. It is introduced by way of contrast.

It is characterized by the loss of power to express the thought in words although the patient *feels* that the idea is

there, and can sometimes explain it in a periphrasis. My patient, even after ten minutes study, is unable to recall and relate in words the story of Noah Webster. The following is her account with much questioning. It begins with *N. Noel?* No. *Noah?* No. *Newel?* No. *Noah?* That's like it. *Recognizes Webster.* *College?* Yale. *Profession?* Lawyer. *What did he do when young?* Taught school. *What else?* Don't know. *A book?* Yes. *Kind?* Don't know. *Dictionary?* I suppose. *Date?* 1790, too late. *Why?* My idea earlier but I don't get the rest. *Was it in war time?* The other one. *Name?* — *Against whom?* All other kinds in United States. *Civil?* Yes, that is it. *Date?* 1861. *Did Webster live then?* Too soon. *Against whom then?* He was not old enough, don't remember now though he taught school.

She did not recollect the capital of Germany, nor in what country Edinburgh was situated, although she had once been a school teacher; but she could reply quite intelligently to any question if she remembered the word to answer, and she could read and write, but in the latter there were frequent omissions of words of which she was quite aware and deplored it. She could not recall the word she wanted, although she at once recognized it when proffered. Her condition intermitted more or less, but never became normal. The importance of the case lay in its diagnosis from a purely psychic amnesia; and to ascertain whether it was not due to a chronic intoxication or whether it was caused by the cerebral necrosis of arterial defect, as I finally decided, as metabolic treatment failed to ameliorate the condition and its oscillations were very slight. That it was not a psychic case is shown by its entire unamenability to psychotherapy, by its genesis apart from any psychological cause, and by the nature and extent of the responses to psychometric tests too long to detail here.

The second case, seen with Dr. Claytor at the Garfield Hospital, is an example which may be called *hysterical aphasia*, in which the *fixed-idea* not to speak was a *reaction of defense* against the fear of relating some intensely humiliating experiences. Indeed the patient tried to chase them from

his thoughts, and the aphasia was partly in consequence of this.

Other Psychic Cases.—It is comparable to the reaction of one of Janet's patients who, because she wished to conceal a fault from everyone, began to lie not only about that but about every thing that she spoke. Another case of Janet's on the contrary, became completely aphasic as a result of trying to conceal thought. The mechanism of a remarkable case described by Dr. Hickling is similar; but is derived from a fixed idea, which is only part of a general paranoid trend. The patient becomes aphasic on account of the delusion that he has been ordered not to speak for so many hours by his hypnotiser.

Formerly, the psychological mechanism of hysterical aphasia was a mystery; but modern *psycho-analysis* has taught us the why and wherefore.⁴ Case No. 2 is a very common type.

Another case which reacted in this way was conducted to be a metabolic defect which led also to *narcoleptic confusion*. Complete deafness and aphonia was the result of a most painful experience in a hospital in Idaho. The condition was recovered from quite suddenly by the stimulating touch of a detective.

Cerebral tumors as causes: faulty diagnosis. *Hystero-neurasthenia* is quite commonly diagnosed to explain a paraphasia which later proves to be due to a cerebral tumor. Such was the case of the girl whom I observed in Paris; and who was treated as a neurotic and isolated for several months by so eminent a neurologist as Dejerine. In the autumn she entered the clinic of Ballet with a well marked amnesic aphasia for substantives, very similar to that of the first case here reported. She had all along been inattentive and frivolous in her ways and had shown slight mental dullness. I watched the slow development of the papilloedema which clinched the diagnosis, and a tumor was found in the left temporo-parietal sub-cortex.

Such recurring attacks of aphasia must be distinguished from those due to *ophthalmic migraine*; for both may be accompanied by headache and vomiting. The jargon-aphasia

of ophthalmic migraine is, however, almost always accompanied by hemianopsia, and the attacks are of very short duration and separated by a period of complete good health, whereas a careful examination of these tumor cases will reveal a defect of speech even between the exacerbations.

In conclusion, this sketch of a vast and complicated subject is designed to emphasize the extreme importance of early diagnosis of forms of aphasia which are purely psychic⁵ and which are most amenable to proper treatment when taken early. Even in the organic forms early detection of the cause may enable us to impose means for its suppression and thus to arrest, even though not to cure, the patient's disease. Such are the cases of temporary aphasia which occur in the course of *arterio-sclerosis* through the variations of blood pressure and osmosis in the weakened blood vessels. The oedemas of *uraemic states* are of this variable type too.

Lastly, variable amnesia and slow comprehension may be one of the earliest signs of intracranial new growth which may be revealed in an examination by one skilled in neurological technique.⁶

I have said nothing of the defects of speech arising from faulty habits, of mental attitudes, such as stutterings, lalling, lisping and the tics of speech, coprolalia, etc. in which the patient is compelled to utter obscene remarks, or barking or coughing. These are psychasthenic phenomena and form a chapter of neuropathology in themselves.⁷

REFERENCES.

1. Semaine Med. 1906.
2. Déjérine: Pressc Med. 1906, 1907. Also Discussion sur l'Aphasie: Rev. Neurol. 1908, etc.
3. Thèse de Paris, 1900. Les Paralysies Pseudo-bulbaires.
4. Author. The Trend of the Clinical Concept of Hysteria. Boston Med. Jour. 1909, March.
5. See Considerations as to the Nature of Hysteria. International Clinics, 1908, Vol. III.
6. See Works of Duret, Oppenheim and Brines and author's paper. Cin. Lancet-Clinic, Apr. 30, 1910.
7. See Janet and Raymond Les Obsessions et la Psychathénie. Paris, 1903.

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REPORT OF TEN CASES OF BRAIN SYPHILIS, WITH COMMENTS.*

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ONE always feels a certain degree of hesitancy in directing attention to a subject which has apparently been viewed and studied from every standpoint, but there is always this that can be offered in apology, that no matter what the pathological conditions or clinical manifestations may be in general, they will vary individually, according to the variations in the characters and qualities of the causative agency, in the reactions of the nature and constitution of the individual to that agency, and in the makeup and ability of the observer; consequently, any report that may be presented, cannot fail to bring out some points of interest, even though it may overlook others of equal or perhaps greater importance.

It has often been demonstrated, that no matter what the subject, or how it is presented, if in so doing it offers but a single thought which will enable us to more clearly comprehend, or to more rationally control that condition, the time and energy utilized in its development, or given to its presentation, is well spent.

So far as the causative agent in this diseased condition is concerned, it is now generally accepted that it is unquestionably a parasitic infection, but there is yet much to be learned in regard to its morphological characters and physiological functions. It is reasonable to assume, however, that it, like all other organisms so far studied, varies in its different

*Read before the Marion County Medical Society and before the Indiana State Medical Association.

properties and characters, and also that there may be different species of the same order. This assumption, furthermore, is supported by the different results produced in different individuals and under different circumstances, yet we must not lose sight of the fact that those variable results may be due in whole or in part to just those different conditions, or different circumstances.

It is well known that the intensity or extent of the primary infection is no positive indication of the virulency or infectiousness of the organism as manifested by later developments. It is not at all an uncommon event to see cases in which the primary infection is or has been so slight as to almost or even quite escape one's notice, and yet the later manifestations prove to be most intense, virulent and vicious, while on the other hand, we also see cases in which the primary infection is extensive and virulent with the later pathological and clinical manifestations quite insignificant and practically nil. With such variability in the causative agent, it is but a natural sequence that there should be a corresponding variability in the results produced.

The second factor refers to the variations in the reactions of the constitution and nature of the individual to the causative agency. It yet remains to be determined to what we must attribute the individual's powers of resistance against injuries or deteriorating agencies. Many theories have been offered in the past, are being promulgated at present, and will be formulated in the future, as to how, when and where the various so-called protective bodies are determined and formed and in what manner they exercise that function. Various apparently plausible explanations have been worked out as to why in the one case we find abundance and activity of these protective bodies, while in another case they are few in number and apparently inactive. Whether this problem will ever be definitely solved, time alone can tell. Life and its processes beyond a certain stage, has ever been beyond the analytical grasp of scientific investigation. Science as yet has not been able to directly convert inorganic material into living protoplasm, nor infuse into it the power of

exercising those faculties and properties inherent to such living protoplasm.

A similar difficulty awaits us in attempting to explain why in the one case the meninges of the brain appears to be the structure predominantly affected, at one time the dura, at another time the arachnoid, at one time the basal portion, at another the convexity, at still another the general. Also, why, in a second case, we find a localized gummatous formation,—in a third, structural change in the larger arteries or veins,—in a fourth, a diffuse involvement of all of the structures. meninges, blood vessels, interstitial tissue and the neuron elements, and in a fifth, a degenerative change involving, apparently, primarily the neuron elements themselves. Many other features of these cases could be alluded to, in which any attempt at explanation only leads us into the realm of imaginative theory in regard to the variations enumerated.

Variability in the makeup of the observer is another factor that comes into consideration which is at once so evident as to call for no further discussion.

The reports of the following cases point out some of the symptoms and features which should always arouse suspicion of the possibility of a specific infection being the causative factor:

Case 1. Female. Age 40. Negress. Gives a history of luetic infection 15 years before the onset of the present trouble. Previous health, so far as could be ascertained, was good. Was taken rather suddenly with a severe right facial neuralgia which responded promptly to potassium iodide administration. About two months later she was seized with dizziness, clonic spasms in both arms, becoming semi-conscious and later unconscious with weakness of the right arm and leg. After a few days consciousness was regained, but there still occurred several attacks of clonic spasms in the right arm, dizziness, pain in the left side of the head and photophobia. No marked alterations in pulse, temperature or respiration. No disturbance of special sense. The condition completely disappearing under the administration of potassium iodide.

Case II. Male. Arabian. Age 33. Complained of intense headache of several months' duration with some digestive disturbances, but no vomiting. Later he was troubled with disturbances of vision, principally that of seeing double. He became stuporous, indifferent to his surroundings, apathetic, somnolent, the headache decreasing as the drowsiness increased. At the time of the examination he was well-nourished, his movements were sluggish and without energy. He was listless and apathetic, mentality was slow and somewhat confused. Facial expression flabby. The left internal rectus was paretic. There was some drooping of the left upper eyelid, some apparent protrusion of the left eyeball, dilatation of the left pupil, both pupils non-reactive to light, reaction to accommodation doubtful.

Vision in the right eye, hazy and indistinct, in the left eye could barely distinguish light from darkness. The right disk showed considerable swelling, the left a well marked neuritis. Disturbances of sensation or motion elsewhere could not be obtained, but he complained greatly of a constant feeling of fatigue and of being easily tired out on exertion. Knee-jerk was absent on the right side.

He gave a history that his wife, who had been previously married to an American, had contracted a bad private disease from her first husband as a result of which she had lost all her hair and was otherwise sick and claimed to have contracted a similar condition from her.

After several weeks of antisyphilitic treatment, the digestion improved, headache became less severe, stupor and somnolence decreased, mentality became quicker and clearer and vision improved so that sight in the right eye was fairly clear, while in the left eye, he could only distinguish much difference by dropping the head and looking out of the upper part of the eye. About this time the patient decided to return to his native land, since which time nothing has been heard of the further progress of the case.

Case III. Male. Age 42. Engineer. Previous health was reported as good, could not elicit any history of syphilitic infection.

The present illness began several months before¹ the time of examination with a rather indefinite change in the manner and disposition noticed by his fellow workmen. Upon returning home from his work as usual one day, his wife noticed that he acted what appeared to her as rather silly and childish and upon being asked what was wrong, replied: "Durned if I know," and upon attempting to eat, seemed unable to masticate the food well and also to swallow it. He became emotional, excitable, irritable, disoriented and confused to the extent of necessitating his committal to the insane hospital. Examination showed him to be well nourished, of powerful physique, inattentive to and non-observant of his surroundings. Facial expression flabby, being more marked on the right side—tongue, lips and hands were tremulous, speech thick, tremulous and drawling, leaving out syllables and words,—saliva dribbled from the mouth and there were frequent ineffectual attempts at spitting. Movements in general were inco-ordinate and ataxic, gait was waddling and apparently weak, the weakness becoming more marked on exercise,—the feet dragging, due, apparently, to an inability to lift them; the knee-jerks were exaggerated greatly, Romberg's phenomenon was marked, ankle clonus was marked, Babinski's reaction prominent, all more marked on the left side. Both optic disks were considerably reddened. In spite of anti-syphilitic treatment, both dementia and paresis progressed rapidly. Finally the organic musculature became involved and the case terminated fatally in about three months.

Autopsy disclosed a localized meningitis and gumma formation, irregular in outline, about ten C. M. in length by five C. M. in breadth and nearly one C. M. in thickness over the anterior, external part of the left frontal convolution, a similar mass over the inferior part of the right Rolandic area and the third gummatous mass in the substance of the left optic thalamus.

Case IV. Female. Age 40. Previous health was reported good, and a history of specific infection could not be obtained. In August, 1906, upon arising from bed one morning, she was suddenly seized with what appeared to

be a stroke of apoplexy, loss of consciousness, complete motor aphasia, paralysis of the whole right side, inability to close the right eye, tongue deviated to the right on protrusion. Sensation was at first decreased, but completely recovered in a short time. She regained some motion in the leg. The right arm became flexed, pronated and rigid. The facial paralysis almost wholly disappeared. The deep reflexes on the right side became greatly exaggerated. Babinski's reaction was marked on the right side.

After having so far recovered as to be able to move about the house unassisted, about two months later she was suddenly seized with convulsions, became unconscious and rapidly passed into coma and death.

Autopsy disclosed a well-marked syphilitic endarteritis with thrombosis of the left middle cerebral artery and softening of the parts of the cerebrum supplied by the occluded vessel.

Case V. Female. Age 53. Complained of intense headache, orbital, frontal and suboccipital, of soreness in the abdomen, mostly across the stomach and around the small of the back, of gas in the bowels and of constipation.

The patient said that she was not robust as a child, yet was never confined to bed. Began to menstruate at 14 and always suffered severe pain, usually requiring medicine to alleviate it. Was married at the age of 18 and shortly after suffered from a severe attack of so-called acute inflammation of the uterus lasting several months. Had several attacks of malaria at different times during her earlier life. Had always suffered more or less from neuralgia and headaches. About five years ago she had several small, hard ulcers in the vulva which healed with difficulty.

Two years ago she began to suffer with the present pain in the head for which she consulted different physicians, some attributing it to the kidneys, some to the nose and throat, some to the stomach and also to the eyes, receiving from each the corresponding treatment. About eight months ago, she began to suffer from double vision which lasted about three months and also from spells of dizziness and periods of somnolence. The patient was poorly

nourished, of sallow complexion, inclined to be bald, and complained of tenderness over the right occipital region on percussion and pressure. Special senses, speech, sensation and motion normal. Ophthalmoscope revealed well marked choked disk in both eyes. There was moderate arteriosclerosis. Spleen was enlarged and floating. Sigmoid colon was tender. Intestines were distended with gas. Superficial reflexes were active. Knee jerks active. A questionable left Babinski reaction. Urine contained some albumen, some pus cells. No casts. Excess of oxalates.

About a week later there developed a rather acute complete left hemiplegia followed by delirium and involuntary evacuation of the urine and faeces. After a few days the mental state cleared up and after some weeks the paralytic condition began to improve and progressed so far as to have recovered almost complete use of the leg but the arm was more or less spastic and in a state of contraction. The physical condition, otherwise, was better than it had been for years and the whole condition seemed to be improving under the iodide administration.

Case VI. Male. Age 31. Clerk. Gives a history of periodical intemperance for some years until about eight months ago, soon after which he began to complain of loss of memory and dizzy spells, the latter being followed by an inclination to somnolence and sleepiness but remained fully conscious of his condition and surroundings. After several months, mental disturbances developed, necessitating his removal to the hospital for the insane.

Upon examination he was found to be well-developed and well nourished, facial expression was listless and apathetic. He appeared to be more or less drowsy and stupid. Was slightly deaf in the left ear. Movements in general were inclined to be spastic and inco-ordinate. The tongue, lips and hands were tremulous. Speech was paraphasic, almost typical of general paresis. Gait was uncertain and inco-ordinate. Knee-jerks were greatly exaggerated, more so on the right side. Ankle clonus was more marked on the right side. Rhomberg's phenomenon marked. Babinski's reaction in the right foot.

A few days after examination he became profoundly somnolent. Right hemiplegia developed. The right external rectus became paralyzed, breathing stertorous, superficial reflexes abolished, swallowing difficult and after a few days coma, convulsions and death.

Autopsy disclosed a syphilitic basal meningitis, a syphilitic endarteritis and thrombosis of the left middle cerebral artery.

Case VII. Male. Age 25. Tool-maker. Complained of an inability to talk well, nervousness, tremor, being excitable and easily irritated and of inability to work. His previous health was good. At the age of fourteen he contracted lues, for which he underwent treatment for about five years during which he was several times mercurialized.

About nine months ago while walking about the city one afternoon he was suddenly seized with a feeling of faintness, some weakness in the left arm and some difficulty in speech, but was quite able to walk home and felt perfectly well otherwise. Upon the advice of the physician consulted in regard to the speech disturbance he remained in bed several days, but apart from the speech disturbance, which was apparently paraphasical, the report is that he felt well. After some weeks he became nervous, tremulous, irritable and excitable, easily incited to outbreaks of anger and very difficult to get along with, at times manifesting some mental confusion. Occasionally he suffered from a moderate headache. Improvement had progressed so far that he had arranged to resume work when he was again seized with an attack of more marked speech disturbance and more or less mental excitement.

Examination at this time showed him to be only moderately nourished. Nervous, excitable, emotional, he showed marked tremor of the lips, face, tongue and hands. Speech was almost typically paretic. The tongue deviated to the left on protrusion and its movements were spastic. At times he was unable to recall words that he wished to use. Writing was tremulous and typically paretic. The tremulousness was increased by excitement or strained efforts to correct. The right knee-jerk was more increased than the

left, both being greatly exaggerated. Some tendency to right ankle-clonus, no Rhomberg and no Babinski reaction. Blood vessels markedly sclerotic. Urine contained some albumen and a few hyaline casts. Mentally, there was a tendency to excitement, obstinacy, more or less confusion and uncertainty. About three months later shortly after awakening one morning he was seized with a severe tonic convulsion lasting several minutes which was followed by a semi-comatose condition lasting about twelve hours.

Following this he had repeated convulsive seizures, involving the left side of the body, the face most, the arm less and the leg least. These gradually grew less severe, at times consisting only of a turning of the head and eyes to the left and some clonic contractions of the corresponding facial and ocular muscles. Consciousness was lost in all of them, but was to a great extent regained immediately after the seizures ceased, sometimes even before. There was almost complete paralysis of the left side involving also the tongue. Sensation appeared to be somewhat decreased, although this may partly have been due to the dulled sensibility generally. The knee-jerks were greatly exaggerated. There was present a left Babinski reaction. He also manifested considerable delirium for several weeks. After this the mental condition revealed at times mild delusional ideas of threatened harm to himself and occasionally to his wife, the former at times leading him to covering himself with the bed clothes or trying to hide behind the screen. The paralysis gave way to a condition of paresis and the movements in general were spastic and inco-ordinate to some degree.

This is practically his condition at the time of writing with his general physical condition otherwise fairly good. The condition is regarded as a syphilitic vascular disturbance with thrombosis of the right middle cerebral upon which was engrafted a probable right side haemorrhagic pachymeningitis.

Several months later this case developed projectile vomiting, rigidity and retraction of the head, somnolence, rise of temperature to 107 and 108 degrees F., coma and death.

Case VIII. Male. Age 37. Tinner. Gives a history

of gonorrhoea at 18. Has never required any medicinal treatment otherwise. The present illness began about one year ago by more or less mental disturbances associated with attacks of unconsciousness, but no convulsive seizures followed by paralysis of the left side of the body, involving mostly the arm, passing off within a day or two.

His facial expression was apathetic and apparently confused, manifested considerable dementia, also tremor of the lips, tongue, hands and feet. Speech was slow, stumbling and tremulous. Writing was tremulous, being exaggerated by excitement or voluntary efforts to write to such a degree as to cause the left hand to shake vigorously during such efforts. Gait and general movements were inco-ordinate and inclined to be spastic. Superficial reflexes were decreased. The deep reflexes were increased and all more marked on the left side. Romberg's phenomenon was present, also Babinski's reaction on the left side. The palpable blood vessels were slightly sclerotic.

Under anti-syphilitic treatment, recovery appeared to be complete.

Case IX. Male. Age 30. Laborer. Gives history of syphilis ten years ago. Previous health otherwise good. The present illness began with extreme nervousness and violent headaches. After some months, the length of time uncertain, he began to manifest some mental disturbances, becoming incoherent in his conversation, his manner and actions, developing delusions of impending harm and subject to outbreaks of excitement and violence toward those about him. He gradually became more and more demented, childish and silly in his manner and actions, very emotional, irritable and excitable, acquired a feeling of general exaltation, both physical and mental. The headaches disappeared. There gradually developed bilateral paralysis of the external ocular muscles, fixation and inequality of the pupils, advanced optic atrophy, impaired vision, pareses of the facial muscles, pronounced paraphasic disturbances, exaggerated knee-jerks, some general tremor, inco-ordination and muscular weakness. After several weeks general convulsions developed followed by coma and death.

Autopsy disclosed a well-marked syphilitic basal meningitis and more or less general meningo-encephalitis.

Case X. Male. Age 38. Clerk. Jew. Was quite healthy as a child. Drank heavily from the age of 15 to 27, but has been practically a total abstainer since. Said to have contracted venereal disease about eleven years ago.

Was perfectly healthy until two years ago when he began to manifest some irritability and to notice that the memory was not as reliable as formerly. About eight months ago he began to suffer from spells of numbness in the hands and some difficulty in speech, lasting about five minutes, recurring every two or three weeks and occurring mostly on Sundays, beginning sometimes in one hand, sometimes in the other and extending to the jaws and tongue, involving speech. Some months later the condition extended to the lower extremities, which also felt weak and was associated with some twitching sensations in the muscles affected. During this time he also suffered from attacks of dizziness, occasional headaches and more marked impairment of memory. The day previous to the examination he suffered from an attack of greater severity than ordinarily and following which he became extremely nervous, restless, excitable, exalted, talkative and emotional.

The clinical picture was typical of general paresis in a hypermaniacal state. He became acutely maniacal, necessitating his removal to the hospital for the insane where he died within two months in a condition of maniacal exhaustion.

His father died at 88, more or less demented, following an apoplectic seizure received twenty years before, resulting in complete right hemiplegia and aphasia. Mother died at 69 of gastric carcinoma. One maternal uncle died of tuberculosis.

Autopsy was not permitted.

In reviewing the clinical data of these ten cases, it will be seen that they correspond in general to those usually given by the various authorities on this diseased condition.

The age varies between 25 and 53, one before 30, five between 30 and 40, three between 40 and 50, one after 50.

The interval between the time of inoculation and of the

manifestation of the first symptoms varies from five to fifteen years. In four, a history of infection was not obtainable, yet the positive findings at autopsy in three of the cases and the prompt and positive response to antisyphilitic treatment in the fourth, establish a positive diagnosis.

Three were females and seven were males.

The onset in two cases was sudden, in eight gradual. Of the former one began with an apoplectiform insult, the other with aphasic disturbances and a general feeling of faintness and weakness. In the former, consciousness was lost, in the latter it was retained. In those cases with a gradual onset, six manifested mental disturbances from the beginning, three motor disturbances and five sensory.

Mental disturbances were present in eight of the cases at some time during the course of the disease.

Loss of consciousness was present in seven cases—in one, it was one of the earliest symptoms; in two, it occurred at different times in the course of the disease; in four, it was a terminal manifestation.

Headache was prominent in five cases, being an early symptom in three of the cases.

Dizziness was complained of in four cases, somnolence was evident in the same number.

Pupillary inequality was present in two cases, the Argyle-Robertson phenomenon in two, disk changes in four, visual disturbances in three, photo-phobia in one, and paralysis of external ocular muscles in two.

Facial neuralgia of the right side was the earliest and apparently the only early manifestation in one case.

Disturbance of speech was present in six cases, in one being of purely motor character, in the others, more of a paraphasia. In one case, it was the earliest and most prominent manifestation.

General muscular weakness was present in four cases, right hemiplegia in three, left hemiplegia also in three. In one, the hemiplegia immediately followed the apoplectiform onset, in two, it was an early manifestation and in the other three, it developed later in the course of the disease.

Tremors were present as a marked feature in five cases; inco-ordination in six, ataxia in two and spasticity in one.

The superficial reflexes were increased in one case, decreased in two and apparently normal in the others.

The deep reflexes were decreased in one case, apparently normal in two, increased in the other seven and in the hemiplegic cases, always more marked on that side.

Rhomberg's phenomenon was present in three cases, Babinski's in five. Convulsions were manifested in four cases, localized spasms in two. Sensory disturbances were present in four cases, digestive disturbances in the same number.

Of these ten cases, two apparently recovered under anti-syphilitic treatment; three improved and in one of these it is still progressing, while in another, a third recurrence of acute manifestations developed; two died of thrombosis of the left middle cerebral artery, one of multiple gumma; one of meningo-encephalitis and basal meningitis and one of maniacal exhaustion.

These cases, in a measure, pretty accurately indicate the different pathological processes by which a syphilitic infection may involve the nervous structures, namely:

1. By meningeal involment.
2. By gummatous formations.
3. By vascular changes in the larger vessels.
4. By diffuse changes, involving more or less all of the structures—a so-called meningo-encephalitis.
5. By degenerative changes primarily.

The first four conditions are usually regarded as so-called secondary or tertiary processes, generally occurring anywhere from two to fifteen years after the primary inoculation, although cases are also reported in which symptoms of cerebral involvement were manifested, while traces of the initial sore still existed. (Kahler.) Swartz, Wood and others report a number of cases occurring within two to three months after infection. Ogilvie, in tabulating the time of the onset from statistics gathered by him, came to the conclusion that in at least 60 per cent manifesting symptoms of intracranial syphilis it occurs within five years after infection.

The last condition differs from the others in the probable mode of development and course of the structural changes of the clinical manifestations, and in its non-responsiveness to antisymphilitic treatment. It is generally regarded as the result of the action of a toxine, produced in the body either directly by the specific organism itself, or indirectly by the reaction of the tissues induced by them, which, if not the direct cause, at least predisposes to it by its modification of the processes of metabolism in such a way as to lessen the power of resistance and to favor the development of the characteristic changes. The latter supposition seems to be the more probable from the fact that in a certain percentage of cases, similar clinical manifestations and pathological lesions are found in the absence of any history or other evidence of syphilitic infection which are apparently induced by other agencies, and yet one can scarcely regard it as a mere coincidence that in so large a percentage of cases of general paresis, given at about 80 per cent., a definite history of syphilis seems assured, and in so many of these it is not at all uncommon to meet with cases in which there are at first definite and apparently positive indications of brain syphilis and later develop the characteristic clinical picture of general paresis.

It is at times most difficult—one may safely say impossible—to differentiate between these two conditions, especially those in which one or the other of the two last named pathological conditions enumerated is probable. This fact has led to some difference of opinion amongst authorities in regard to the primary pathological changes occurring in general paresis, some claiming that the primary change is a degenerative one beginning in the neurones with the vascular and interstitial changes arising secondarily, (Molt,) while others regard it as primarily vascular in origin, with the degenerative changes arising secondarily, and still others that the meningitis or interstitial change is the primary one. But it has been determined that there exists no relative proportionality between the glia proliferation on the one hand and the destruction of the neurones on the other.

So, also, has it been found, that not infrequently there

exists a rather intense cortical disease with a relatively mild meningeal disturbance. Since all of the elements entering into the construction of the nervous system are more or less involved in all well marked cases, sometimes the changes being predominant in the one element, sometimes in the other, it appears justifiable to assume that the fundamental pathological anatomy is a diffuse change involving more or less all of the structures.

Some authorities do not include general paresis under the clinical group of intracranial syphilis, even though recognizing the prominent causative relationship between the two. This close and intimate relationship is clearly indicated in the reports just given and certainly seems to offer considerable justification for including them under that classification.

The diagnosis of these conditions is at times relatively easy and evident, at other times most difficult. Since the positive determination and identification of the parasitic nature and of the more or less specific serum reactions present in syphilitic individuals has been placed upon a more definite basis, the diagnosis can be made with almost absolute certainty. But the minutiae and details of the methods necessary to carry out these examinations render it so difficult, require so much time, that they are practically inapplicable except in well equipped laboratories and by regular laboratory workers, hence the great majority of clinicians still have to rely upon the history, the clinical manifestations and the results of the treatment.

Even though there is not any one sign or symptom that can be regarded as pathognomonic of a syphilitic condition, yet there are some general features of the clinical manifestations which should always arouse one's suspicion of such a basis.

Some of the more prominent of these are:—

1. Changeability and multiplicity of symptoms.
2. The onset of manifestations, being sudden rather than acute, sub-acute rather than chronic.
3. The disease running a course more or less in stages, showing,
4. A tendency to remissions and recurrences.
5. The accompanying pareses and paralysis being

transitory and changeable, corresponding more or less closely to the pathological-anatomical alterations at the basis.

6. The usually ready and prompt response to appropriate treatment outside of the vascular and degenerative condition.

Lumbar puncture at times also furnishes valuable information, for according to some French authors, an increase of leucocytes in the cerebrospinal fluid in the absence of a suppurative condition, is indicative of a syphilitic nature.

The specific serum—reaction of Wasserman—which requires the employment of an extract derived from syphilitic tissue in conjunction with the serum of some animal (rabbit) immunized to the blood of some other animal, (sheep), is too complicated and difficult to be utilized except by regular laboratory investigators. The same may be said of Noguchi's serum reaction. Noguchi has also reported successful results with a so-called butyric acid reaction, which, if it prove reliable, is much easier of application, so that it can be utilized in the busy life of the clinician.

Some other investigators have been experimenting with a solution of taurin along similar lines and with this the writer has had some experience, but the number and results of such examinations are not of such a nature as to justify any report being made or conclusion drawn.

With all these investigations there will doubtless eventually evolve some method of facilitating the establishment of an earlier and in doubtful cases of a more positive diagnosis of a syphilitic basis in diseases of the nervous system and so enable one to adopt the earlier and to carry out the necessary treatment so long as there is evidence of the presence of any syphilitic infectiousness or toxicity in the tissues or fluids of the body.

It will be seen that the prognosis in this diseased condition is not a very bright one. This unfavorable outlook, to some extent, depends upon the particular pathological lesion existing at the time. The meningitic and gummatous conditions apparently yield the most readily to treatment, the arterial and diffuse changes much less so and the so-called degenerative changes least so, if at all.

The treatment in all cases must be actively and vigorously antisiphilitic and whatever special method may be followed, must be based upon the peculiarities and susceptibilities of the individual patient and upon the effects resulting from the method adopted.

As a preliminary measure it is always essential in every case to ascertain the exact condition of all excretory channels and to place them in the best of functioning order before instituting very active antisiphilitic measures, otherwise one must not be disappointed if results that *should* follow are not forthcoming.

It is not at all uncommon to meet with cases who report having been subject to prolonged administration of mercury and iodide even to the point of salivation or of iodism, without any apparent benefit, more likely harm, and yet, where proper precautions are taken to insure good absorption and good elimination, respond readily to such measures.

It is impossible to lay down any hard and fast rules. Observation and experience alone enable one to determine what will be best in each individual case.

335 Pythian Bldg.

[GOING BACKWARD IN PENAL PSYCHIATRY.

SELECTED, WITH COMMENTS BY THE EDITOR.

THE following extracts from the hearing on February 21st before the Committee of Public Charitable Institutions of Massachusetts on the necessity of immediate provision being made for the mentally ill people who are now thrown into prisons, pending examinations and transference, tell a terrible tale of neglect and inhumanity. Forty-six per cent. of all insane commitments in the State of Massachusetts are made in Boston and five hundred persons each year are thrown into the penal institutions of Boston before being sent to hospitals. It is to remedy this evil that the following named gentlemen and ladies appeared before the above Committee.

Dr. L. Vernon Briggs.

Mr. Robert A. Boit, President of the Boston Dispensary.

Dr. James J. Putnam, of the Massachusetts General Hospital.

Dr. Richard C. Cabot, of the Boston Chamber of Commerce.

Mr. Arthur L. Spring, Corporation Counsel of the City of Boston.

Bishop Lawrence, of the Eastern Diocese of Massachusetts.

Prof. William T. Sedgwick, of the Institute of Technology.

Mr. J. G. Thorpe, President of the Mass. Prison Association.

Rev. Dr. Elwood Worcester, of the Emmanuel Church.

Mrs. Barrett Wendell, President of the Colonial Dames.

Dr. John H. McCollom, Superintendent of the City Hospital.

Mrs. Henry Parkman, Secretary of the Municipal League.

Miss Higgins, Secretary of the Associated Charities.

Dr. Albert Evans.

Rev. Edmund F. Merriam, Editor of "*The Watchman*."

And others.

DR. L. VERNON BRIGGS.

"In Massachusetts we are living back of the time of Pinel who, over a hundred years ago, struck the chains from the insane people in the great hospital in Paris and allowed them the freedom of the hospital and gave them hospital care. To-day we are so far behind those times that we allow the police of our city to go into our houses and take members of our family or our friends to the station house and to cells which are filthy in many instances and thence to the city prison where instead of hospital care and the treatment that Pinel gave his patients over a hundred years ago, we put them in cells and confine them in straight jackets." "The last report of the State Board of Insanity states that on October 1st, 1909, the whole number of persons under the supervision of their Board was over 14,000. The average increase for the last five years was not over 400. For construction and other special appropriations they ask for over \$800,000 this year. They have received over half a million dollars a year for the last eleven years for this purpose. They ask for over two million and a half for maintenance this year. The average that they have received for maintenance for the last five years is net over two million and a quarter and this has increased last year 10 per cent. On December 1st, 1908, the state had invested in these institutions over \$12,000,000 and not a cent in any hospital used only for the observation and care of the incipient and early cases as a preventive measure. The State has a debt on account of the institutions under the supervision of the State Board of Insanity of over \$5,000,000 with an annual interest charge of about \$200,000. Is it not time to do something to stop this ever increasing bur-

den upon the State?" "Because Massachusetts has not taken care of its incipient insane and provided for the prevention of insanity, it has now a hoard of chronic insane people on its hands increasing every day and at an enormous expense to the State and a loss of intelligence to our community."

DR. RICHARD C. CABOT, said:

"Gentlemen, you want first hand information here. I want to make a plea that you take one minute's walk from this committee room to the jail and look at it,— and I have not the least doubt that if you do that you will feel that something ought to be done. I am not an alienist, and I have no expert knowledge as to what should be done at the city jail here, which, as I say, I urge you to visit. You will see, of course, a very large assortment of common drunks, and about as close to them as the cages in a circus menagerie, and under about the same conditions, you will find, at certain days, insane people. Now, the conditions at the city prison seem to me perfectly good for the common drunkards. It is not a question of sentiment; it is a question relating to an insane person who is not as hardened as a common drunkard is to these conditions. I want to say a word as to those physical and mental conditions and their effect upon persons brought into contact with them. In the first place, as to the physical conditions. As Dr. Briggs has said to you, there is a padded cell a little bigger than the table at which you are sitting, with a perfectly plain wooden floor, with no provision for sleeping whatever. There is no mattress in the place, and the police captain who showed me around there said it would be impossible to keep a mattress there on account of the collection of vermin that would inhabit it. There is no provision whatever for the passage of urine for some of these people. If they are able to go out that is all right, but the majority of them cannot be. So much for the more obvious physical side. The exhaustion of the patient, under these conditions, on the physical side, is tremendous. On the mental side, to be confined in this way in a group of cages, with the drunks across the way calling back and forth, carries with it results that can be

imagined. One of the officers there said to me, the drunks bothered the insane and the insane bothered the drunks; and I don't wonder. The drunks don't appreciate any difference between themselves and the insane, and they amuse themselves with calling back and forth. Now the terror, the misery, of being confined under those conditions on the physical and mental sides, seems to me such that if you could see those conditions for yourselves you would have no doubt something ought to be done. That is all I am concerned with. I don't know what ought to be done. But I am perfectly clear that something should be done. The officials of the prisons seem to be of the same opinion. They are doing their best; there is no scandal there; but they don't like the conditions any better than we do."

MR. J. G. THORPE, said:

"The official connection which Dr. Briggs has alluded to, and the experience it has given me, simply gives me a right to say that the places of detention of the city of Boston—or, in fact, of the State in general—are entirely unfit places to send insane people. The fact that they are sent is recognized as inhuman and disgraceful by many States of the Union; it has been so recognized by the State of Massachusetts; and I don't see why the cure should be postponed a day longer than it is necessary. I simply stand up to be counted, and my experience, as I say, gives me a right to be heard upon the subject."

MRS. BARRETT WENDELL, said:

"I really don't feel that I ought to take your time, but I should like to represent many women in the commonwealth to say how deep an interest we feel in this matter, and how truly Massachusetts has always stood for humanity,—and that we have got to stand for that now,—and that we can't let such a thing as this go on."

MISS HIGGINS, said:

"I am the secretary of the Associated Charities, and my Society is in favor of it. Don't let medievalism stay with us any longer."

DR. ALBERT EVANS, said:

"One hundred years ago this same discussion was going forward in Massachusetts. Dr. James Jackson and Dr. John C. Warren of Boston called attention, in a circular letter, to the need of a hospital for the insane, in these words, I quote from the letter. Aug. 20, 1810. 'It has appeared very desirable to a number of respectable gentlemen that a hospital for the reception of lunatics and other sick, be established in this town.' What became of that letter? It was the germ from which grew that great and splendid institution, the Massachusetts General Hospital, where there is, night and day, ever ready aid for all who may be sick or injured in body, while the victim of a mental sickness, apparent or real, goes into jail awaiting the movements of soulless committees. One hundred years ago this good seed was planted in Massachusetts. Anything wrong with the soil of Massachusetts, that she could not grow a perfect plant? She has not even grown a hedge about her borders, under the shade of which the insane can find *immediate* relief. Since that time so long ago the seed has been sown again and again. A perfect product has not been harvested in Massachusetts. Gentlemen, why are we here *pleading* for a thing *so* righteous, *so* humane, *so* urgent? We are come here as the spokesman of those who by disease or injury are incapable of intelligently expressing their own needs. Disregarding for the moment the question of our moral duty to those sick ones, the actual results of immediate care and treatment in incipient insanity pays well the State that gives it. A mind may merely "slip a cog," and if taken hold of at once, become geared up into a normal running once more. Gentlemen, the State owes a solemn duty in this matter and there comes a time in the life of every son and servant of the State when duty becomes high privilege. If it is the duty of the State to care for these unfortunates, it is her duty to care for them in every particular. What stands in the way of the enactment of this bill? Who is it that does *not* endorse it? Does it lack the endorsement of the State Board of Insanity? Is the chairman of the State Board of Insanity here to-day advocating the rightness and justice and expediency of this

bill? I do not know. But this I do know, that in the light of truth and the *facts*, all sane disinterested men endorse this bill. And what are the facts? I'll tell you. Buoyed by hope we have lived on promises. Promises of better things to come. These promises have lacked the assurance and conviction of honest purpose and politics block the wheel of progress. One hundred years! a long incubation period! It's time something was hatched."

Who is it among the observant and charitable who know what rational and tender consideration is due the victims of the saddest of afflictions—insanity—that does not lament the lines among which these unfortunates have fallen, because of the ignorance and unfeeling neglect of political place holders and too often the benighted and inconsiderate police of our cities.

Reader, is your city government in this sad uncivilized, unhumane list concerning the pauper insane of your almshouses and prisons?

A real detention and observation hospital with proper provision for sanitation, comfortable and right temporary medical care, under supervision of the skilled in psychiatry, should be erected as an annex to every city or county hospital and almshouse. It should not be that Pinel, Chiarngi, the Tukes, the Yorks and their philanthropic successors in philanthropic psychiatry, should have lived and labored in vain for these most pitiable of the world's children of disease misfortune. Even Benjamin Rush in his remote day in American medical philanthropy would have done better for the insane and the insane inebriate than is being done to-day in some quarters.

CLINICAL AND LABORATORY OBSERVATIONS OF PARESIS.*

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and

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CLINICAL OBSERVATIONS OF 22 CASES OF PARESIS.

FREQUENT attempts have been made to establish a pathognomonic clinical sign of paresis but such is not possible, for a clinical diagnosis can be made only on the correlation of symptoms.

No portion of the entire cerebro-spinal nervous system or of its peripheral nerves, or the sympathetic system, is immune from the disease. Therefore, we expect a most complex symptomatology, and to find certain symptoms or group of symptoms as one or the other parts of the nervous system are affected. While it is no doubt true that the disease makes its attack chiefly on the cerebral cortex, and we have corresponding symptoms, yet we have other parts of the nervous system affected, and have other symptoms predominating corresponding to the parts involved.

The atypical case and the frequent appearance of analogous symptoms in other cerebral organic diseases having a distinct pathology, have made apparently an endless degree of confusion. There are other brain disturbances showing symptoms so closely resembling those of paresis that we are often unable to determine the difference.

It appears that the difficulty lies in that we are con-

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tinually endeavoring to make all our cases conform to a certain type. Why are we not to expect a variation in the mental syndrome, when we have such variability in the symptoms in other brain affections as brain tumors, brain sclerosis and in old cases of softening and hemorrhage?

In making a comparative clinical statistical study of these 22 cases, many obstacles have been met with in obtaining a complete and detailed history on certain data, thus making the information on some of the topics somewhat lacking. Relatives and friends are often exceedingly reticent on questions pertaining to inheritance, habit, disposition, alcoholic and sexual excesses.

It is regretted that a systematic and complete examination of the spinal fluid could not be carried out.

As the psychical and physical manifestations of paresis are by no means constant, the synopsis of the symptoms, represented below, are a summary of those taken from an examination within 30 days after the admission of the patient to the institution.

During the fiscal year ending Sept. 30, 1909, there were 319 new cases examined, representing ten different psychoses. Of this number 22 or 6.8 per cent were cases of paresis, 18 or 10.4 per cent representing the men and 4 or 2.7 per cent representing the women.

The disease presented itself in the following types:

Grandiose type, 12 cases; Tabo-Paretic type, 6 cases; Depressed type, 4 cases.

The rather mature age at which this disease begins, would naturally point to the fact, that it is more frequent in married men or men that have been married, than in single men, and this is borne out by the following statistics:

Men: 14 married, 4 single. Women: 4 married.

Of the 4 married women, two were without offspring, and of the fourteen married men, six were without offspring.

The occupations were represented as follows: Men: 4 laborers, 1 painter, 1 physician, 1 marble cutter, 1 wood-worker, 1 cooper, 1 barber, 1 plumber, 1 agent, 1 musician, 4 railroaders, 1 with no occupation.

Women: 3 housework, 1 dressmaker.

The ages were represented as follows:

Men: 1 case from 25 to 30 years of age; 2 cases from 30 to 35 years of age; 6 cases from 35 to 40 years of age; 4 cases from 40 to 45 years of age; 3 cases from 45 to 50 years of age; 1 case from 50 to 55 years of age; 1 case from 55 to 60 years of age.

Women: 1 case from 25 to 30 years of age; 1 case from 30 to 35 years of age; 1 case from 50 to 55 years of age; 1 case from 55 to 60 years of age.

Duration of the disease before admission to the hospital was as follows:

Less than 1 month, 5 cases; 2 to 3 months, 2 cases; 6 to 9 months, 7 cases; 1 to 1½ years, 5 cases; 2 years, 1 case.

Two of the cases had reached the terminal stage before it became necessary to remove them to the hospital and both of these cases died within three months after their reception.

Of the twenty-two cases, the total number of deaths, up to the present writing, were eight; these having died within nine months after their admission to the institution. The causes of death were as follows: 5 in paretic convulsions, 1 of chronic nephritis, and 2 of pneumonia. Of the fourteen cases still living, two are in a period of remission and have been furloughed, the remaining twelve cases are still in the institution. The gradual progression of the disease has been manifested in eight of these, in the other cases marked mental and physical reduction has rendered them almost absolutely helpless.

In all statistical studies of paresis, heredity, in connection with the excesses of various kinds, is a factor not to be neglected. In only one case of this series was there a history of a psychosis in the ancestry, but in eight of them there was a history of either epilepsy, apoplexy, a neurosis of some kind, or some indistinct organic disease of the brain in some one of the progenitors. For example, in one case, the mother is reported as having had "softening of the brain," and in another case, an uncle is reported as having died of "inward spasms." From a rather indefinite and unintelligible description, a brother of one of the patients probably

had chorea during childhood. Pronounced alcoholic intemperance was noted in three cases.

The exciting causes obtainable were headed by syphilis, 10 or 45.45 per cent presenting such a history. Although this is a rather low percentage of a previous luetic infection, in five other cases their lives had been so irregular that there was every reason to suspect it. One of the patients in whom a history of syphilis was positively denied, had had five miscarriages, brought on, as she expressed it, "without any cause." There are many difficulties in getting reliable information in this particular, either the patient's memory is so defective that little dependence can be placed on his statements, or reticence on his part causes him to conceal it.

The time between syphilitic infection and the outbreak of the psychosis in the ten positive cases was as follows: Four cases, the interval was less than twelve years, the remaining six cases the time was between twelve and eighteen years. The shortest duration of time antedating the psychosis was in one case seven years.

Chronic alcoholism was a factor of considerable etiological significance in three or 13.6 per cent of the cases. Care was taken to distinguish between alcohol, as an etiological factor, and the drink habit, which developed as a result of the disease and is not of causal importance. One of the alcoholics was also syphilitic and one of the syphilitics, a painter, had had several attacks of lead poisoning which eventually caused him to give up his occupation. One of the alcoholics had indulged so excessively that he took the "Keeley Cure," twelve years previous; in the two other cases there was a continuous indulgence antedating the onset of the disease for several years.

Other causes given were as follows: Mental strain and overwork in three cases, prolonged worry and anxiety in one case, sexual excess in two cases. Traumatism was given as a cause in one case, but as the injury was so far remote from the onset of the disease, and the life of the patient was so irregular, no doubt some other agency was also in play.

As to what were the first symptoms in each of the dis-

eases was exceedingly hard, probably impossible, to ascertain.

Each of the twenty-two cases, as will be noted below, by some form of pupillary abnormality, passed through an indefinite period of vague physical ailments before the friends and relatives, indeed also the physicians, realized that there was a serious disease at work. In one case, the very first manifestation was a convulsion, which, of course, showed that the disease had progressed to a comparatively high point.

The earliest physical symptoms noticed, as far as could be ascertained, consisted in a change of facial expression, convulsions, spasms of various muscles, ocular defect, exaggeration of the tendon reflexes, headache, insomnia and various gastro-intestinal disorders. Mentally, there was a diminution of the physical energy, at times anxiety, indecision and irritability of the patient showed themselves and also indifference to the things which formerly affected them most. Irritability was the symptom that most frequently occurred and it was the one most easily noticed by the friends.

Dementia was present in varying degrees in each case from a gap in the record of time to a total abolition; one case did not even recollect his own name. One patient believed that he had been in the institution twenty-seven years, and another that he was incarcerated in a prison on some unknown island.

Grandiose ideas occurred in fifteen cases, in eight of which they were the first symptom, the patient suddenly having extravagant ideas of wealth and power and ordering vast quantities of goods for which he had no use and giving away money and writing checks with a lavish hand. One patient stated that he had millions of carloads of million dollar bills, another that he had a race horse that travelled 1000 miles a minute. Only one of the women had grandiose ideas, and she believed that she was the mother of hundreds of children.

Delusions of egotism were pronounced in six cases. One case believed that he was God himself on earth. This patient had also vivid auditory hallucinations, as he frequent-

ly would have communications with the "Heavenly God" at will or upon suggestion.

Hypochondriacal delusions were present in three cases, in all of these cases the hypochondriacal ideas were in reference to the abdominal region.

Delusions of persecution which were all unsystematized and loosely held, were present in four cases. In only one case did they lead to any definite action, and that was in a case of an alcoholic who persisted in secluding himself because he thought he was being pursued by a mob.

Delusions of poisoning were present in two cases.

One case with the delusion of infidelity made a dangerous assault upon his wife.

Several of the cases presented more than one type of delusions.

The evidences of hallucinations and illusions were most difficult to ascertain but were strongly suspicious in five cases. Their character generally confined themselves to the delusions manifested, as for example, the patient previously mentioned who had the delusion that he was "God on earth," also had the auditory hallucination in which he frequently "heard the voice of God."

Emotional instability was a very characteristic feature in all cases, but exaltation predominated, occurring in fifteen cases. In five cases exaltation and depression were frequently interchanged; two cases in women showed marked depression as the predominating emotional state. The majority of the cases showed temporary, sudden and often careless, transitions from happiness to depression, from laughter to tears, while in the interval there was often apathy and even stupor. In four cases that died, as with three of the cases that are still living, the emotionalism, like the delusions, gradually became blunted, until the zero point was finally reached.

Other psychical symptoms were as follows: Disorientation as to either time, place or persons in seven cases; marked incoherence in nine cases; negativism in two cases; homicidal tendencies in eleven cases, and suicidal tendencies in five cases. The disorientation corresponded in every case pretty closely to the defect in memory.

In all cases the attention was easily fatigued. The consciousness was considerably clouded in those cases that presented disorientation. There was more or less poverty of thought in every case, limitation to personal concern, and more or less inability to acquire something new; thirteen of the cases failed completely in the numerical reproduction test.

Fear was present in three of the cases, in one of them it amounted to terror. Increase in volitional impulse was present in eleven cases, and all of these were reported homicidal, but the motor activity when present was not lasting. The conduct was generally in accord with the mental symptoms; one case was a criminal.

The following is a synopsis of the physical findings: As already stated above all cases presented some form of pupillary disturbance, either as follows: 7 cases unequal, 5 cases irregularity of pupillary outline, 1 case pupils dilated, 4 cases pupils contracted, 9 cases pupillary reflex to light diminished, 5 cases pupillary reflex to light absent, 8 pupillary reflex to accommodation diminished, 4 cases pupillary reflex to accommodation normal or the Argyll-Robertson pupil. The most frequent pupillary reflex disturbance was either diminution or loss of the reflex to light, occurring in fourteen cases.

Defect in speech was present in 10 cases and was one of the first symptoms to attract attention, frequently being commented upon by the patients and designated by them as "thick speech." This disturbance consisted in the repetition of the final syllable, the elision of various syllables and slurring of consonants and also hesitation in the speaking.

The handwriting was affected in thirteen cases comparatively early, due to the fine muscular tremors. This was manifested by the omission of certain letters of the word, or certain words of the sentence, and a motor tremulousness in a certain wavy curve in the letters, producing an irregularity in formation of the letters. In other cases there was a reduplication of syllables and words.

Marked disturbance in gait, which was characteristic in five cases, was manifested by an awkwardness and an uncertainty in walking unaided. Typical ataxic gait was noticed in three cases.

Tremors were present in thirteen cases, the face, tongue and extremities, in the order named, being most frequently and most prominently involved. The six cases that were associated with tabes naturally afforded a greater variety of neurological symptoms. The co-ordination disturbances were more noticeable in connection with the more complicated procedures, such as the finer movements of the fingers and the contraction of the facial muscles. The Rhomberg phenomenon was distinct in five cases. The tremors as a rule were fairly rapid and were best demonstrated by having the patient extend his arms, stretch out his fingers, or protrude his tongue. Tremors of the lips and of the labio-nasal fold were also quite frequent. In one case the tremor of the tongue was so marked that an attempt at speaking gave rise to a most curious grimacing of the face.

Patellar reflex disturbances were as follows: 13 cases bilateral patellar reflex, 6 cases abolished bilateral patellar reflex, 1 case decreased unilateral patellar reflex, and in 2 cases the reflexes were normal. In all cases that were complicated with posterior spinal sclerosis, the reflexes were lost entirely. As to whether they were ever increased early in the disease was impossible to ascertain. As was previously stated, these findings are in consequence of an examination of the patient shortly after admission to the institution and in several of the cases the disease had already existed as long as from 1½ to 2 years previous to admission to the hospital.

Babinski reflex was demonstrated in one case and unilateral ankle clonus in two cases.

Epileptiform convulsions were present in three cases, not including the five cases that died in convulsions. Two of the cases had had apoplectiform attacks.

Sensory disturbances as far as could be ascertained were present in but very few of the cases. The sense of touch was comparatively normal in all of the cases excepting two of them, these presented anæsthesias throughout the lower extremities. Abnormality in the sensibility to pain was observed in three cases; in one case there was a complete analgesia throughout the entire body. In three cases, numbness and tingling in the extremities occurred early in the

disease. In a number of the cases on account of the advanced existing dementia the various degrees of sensibility disturbance could not be as satisfactorily carried out as was desired.

Frequent headaches were present in seven cases; insomnia in four cases.

The pulse was arrhythmical in six cases and somewhat increased in frequency in nine cases. The respirations were somewhat accelerated in four cases, one of these cases had pulmonary tuberculosis.

Two of the five cases examined ophthalmoscopically presented some changes in the discs.

More or less defective hearing was present in five cases. Three cases presented incontinence of urine; 1 case intractable diarrhoea.

The physical diseases associated with the psychoses were as follows: 1 case aortic regurgitation, 2 cases bronchitis, 1 case carbuncle, 2 cases cystitis, 2 cases conjunctivitis, 10 carious teeth, 2 entero-colitis, 2 gastritis, 1 tonsillitis, 1 pulmonary tuberculosis, 1 joint tuberculosis, 1 nephritis, 3 marked arteriosclerosis, 1 adenitis.

SUMMARY.

1. Paresis is an organic disease of the brain with or without involvement of other parts of the nervous system with superimposed mental symptoms.

2. Men were much more frequently affected than women.

3. The largest number of cases occurred between the 35th and the 45th year of age.

4. Married men were much more frequently affected than single men. All the women were married.

5. 36.6 per cent of the cases died within one year after admission to the institution.

6. The most frequent occupations represented were railroaders and laborers.

7. Heredity of indirect type was probably a not infrequent predisposing element in the disease. A psychosis in the immediate ancestry was exceedingly infrequent.

8. Syphilis was the fundamental cause with alcoholic excesses and mental stress as determining causes.

9. The disease was usually well advanced before a diagnosis was made and the patient committed to the institution.

10. The gait and writing were altered in a large percentage of the cases on admission to the institution, due to the muscular tremor and weakness and to the diminished activities of the psychic functions.

11. Pupillary disturbances, as inequality, irregularity, were early symptoms and either diminution or loss of the pupillary reflex to light were the most frequent.

12. Tendon reflexes were most frequently exaggerated and were early manifestations.

13. Sensory disturbances were early but rather infrequent symptoms.

14. Memory defect, in some form, was present in every case.

15. The grandiose type of the disease predominated, but the depressed form was by no means infrequent.

16. Convulsive seizures occurred early in the disease and were also the first symptoms in one case to attract attention to the disease.

17. Convulsions were the most frequent cause of death, and they occurred regularly for a considerable time before death appeared.

18. The variability of the clinical symptoms observed and the presence of analogous symptoms in other organic brain diseases make it appear probable that in paresis we do not have a definite mental entity, directly relating to the disease.

19. From our knowledge of other brain diseases accompanying mental symptoms, the paretic syndrome may be regarded as being capable of numerous causes.

20. The clinical differentiation of paretic dementia is often very difficult, in fact frequently impossible. The late appearance of the so-called characteristic mental and physical signs may prohibit an early diagnosis.

21. The diagnosis of paresis should only be made by a correlation of the mental and physical signs. There is no one pathognomonic clinical symptom.

22. The differential diagnosis clinically is often a matter of great difficulty. The distinction from arterio-sclerosis of the nervous system, brain syphilis, multiple sclerosis, chronic alcoholic insanity with organic brain changes and cerebral tumors may be impossible. Such a differentiation is particularly difficult in the early or incipient stages of the diseases.

23. By comparing the mental symptoms observed in other brain diseases we are more clearly impressed with the fact that in cases of paresis, there can be no well defined clinical picture. Of necessity we must have multiform mental and physical signs.

LABORATORY OBSERVATIONS.

These notes were taken from the cases studied during the year 1908-09, and are brief reports of the findings of the examinations of the gastric contents, blood examinations, urinalyses and cases posted at autopsy.

GASTRIC ANALYSES.

The gastric contents were removed from and studied in fourteen cases of paresis, one female and thirteen male. The patients were given an ordinary test breakfast consisting of 300 cc of water and 35 gms. of ordinary baker's bread. One hour afterwards the contents were removed by means of the stomach pump—collected in clean vessels and taken to the laboratory for examination. The stomach tube was readily passed, the patients were quiet and docile. The tube was first swallowed while in the sitting posture—the patients were then placed in the reclining position and the tube passed into the stomach.

The examinations consisted of noting the total amount withdrawn, testing for hydrochloric and lactic acid, estimating the total acidity and the microscopical examination. A few specimens were examined for chlorides, phosphates, glucose and albumin. These were present in the cases tested. The total acidity was estimated with a decinormal solution of sodium hydroxide, with an alcoholic solution of phenolphthalein as an indicator. Ordinary Congo Red was used for determining the presence or absence of hydrochloric acid, while per centage of hydrochloric acid was obtained by the

method outlined by Holland in estimating the total acidity.

Uffleman's reagent was used to determine the presence or absence of lactic acid.

In seven cases the total amount removed ranged from 10-25 cc, six cases 40-60 cc., one case 115 cc. Assuming that .25 per cent of hydrochloric acid is the normal, 10 cases or 70 per cent showed a hypoacidity—ranging from .04 per cent-.24 per cent while four showed a hyperacidity—ranging from .29-.38 per cent. The total acidity showed a corresponding variation. In ten cases it was diminished, ranging from 10-50 per cent. Three cases from 67-85 per cent, while one case required over 10 cc of decinormal solution to neutralize 10 cc of the gastric contents. Lactic acid was not observed. The bacteria were those usually found in the gastric contents. It might be added that Oppler Boas bacillus was found only in one case.

URINE REPORTS.

These examinations were made at the time of admission and in the general summary of the twenty-two cases we find that albumin was present in two cases: hyaline casts in one case; granular casts in one case; bile pigment in two cases; indican in two cases; nine cases showed many leukocytes; two cases showed pus cells; one red blood cells; six cases showed many epithelial cells and one case showed spermatozoa.

BLOOD REPORT.

The object of these examinations was (1) to determine, if possible, a definite blood picture in paresis; (2) If paresis was due to a specific organism would it manifest itself clinically in the blood by a high leukocyte count; (3) Would the disease so highly dependent upon syphilis for its etiology, and regarded by some as postsyphilitic, parasymphilitic or metasyphilitic, present a lymphocytosis which is seen in secondary and tertiary syphilis?

During the past year we examined the blood of twelve cases of paresis. The subjects were all men. In reviewing these findings the hemoglobin ranges from 80-100 per cent. The white cells in 75 per cent of the cases range from 6000-9000, while in 25 per cent they range from 10000 to 11500.

The differential counts (here we use the simple classification of polynuclears, lymphocytes, eosinophiles and basophile and transitional) do not cast much light upon the picture. The polynuclears range from 69-91 per cent, 50 per cent show a count from 62-75 per cent which are here regarded as normal. 50 per cent show a range from 75-91 per cent, which might be regarded as a polynuclear increase. The lymphocytes, contrary to the findings in secondary and tertiary syphilis, in 50 per cent of the cases were normal, while in the remaining 50 per cent they were diminished—ranging from 10-25 per cent and in all the cases there was an increase in the large lymphocytes. The other white cells were usually absent, or if present, were in normal proportion. One case showed rather large red cells and slight poikilocytosis.

Conclusions:—The hemoglobin, red cells and white cells, save for a possible polynuclear leukocytosis, an increase in Hyoline, or large lymphocytes, with diminution of the total number of lymphocytes, have been found practically normal. It is doubtful whether these slight changes would be of aid in differential diagnosis.

AUTOPSY REPORT.

During the past year 43 cases were posted; of these 4 were paretic and here grouped under the various systems of the body are the gross lesions which were demonstrated. Total number posted four. Decubitus in two, abnormal nose in one.

Circulatory System:—Pericardium-pericarditis acute, in one, chronic pleuro-pericarditis in one. Heart-dilatation in one, fatty degeneration in one, fatty infiltration in one, chronic interstitial myocarditis in one, segmentation in one. General summary: The pericardium showed changes in 50 per cent of the cases and the heart showed changes in 75 per cent of the cases. Vessels—atheroma was observed in three cases and general arteriocapillary fibrosis in two cases. In all of the cases vascular disease was demonstrated.

Respiratory System:—Pleurapleural effusion right side, one; acute pleurisy right side, one; chronic bilateral pleurisy in three. It is interesting to note that 100 per cent of the

cases showed pleural disease. LUNGS:—Anthracosis in two, atelectasis in one, congestion in two, edema in one, emphysema in one, tuberculosis in two; in all of the cases pathological lesions of the lungs were demonstrated.

ALIMENTARY SYSTEM:—Peritoneal effusion in one; LIVER—cirrhosis in two, congestion in two, cloudy swelling in one; fatty changes in one; in each case a pathological lesion was demonstrated. Gall stones were observed in one case, 25 per cent. PANCREAS—chronic interstitial pancreatitis was demonstrated in two cases, 50 per cent.

Genito-Urinary System:—Bladder—chronic cystitis was observed in two cases, 50 per cent. KIDNEYS—congestion in one, chronic diffuse nephritis in one, chronic interstitial nephritis in one, chronic parenchymatos in one. In 75 per cent of the cases chronic diseases of the kidneys were demonstrated and in the remaining 25 per cent a recent condition was demonstrated. OVARIES—in one of the two cases which were females, were cystic and calcareous, and one showed senile changes. The uterus was anteflexed in one case, and there was an ulceration of cervix in the other case.

Glandular System:—Spleen showed congestion in two cases, amyloid degeneration in one case, fibrosis in one, perispleenitis in one; in 75 per cent of the cases there were gross lesions in the spleen. Suprarenal showed cloudy swelling in one case—or in 25 per cent there was lesion in the suprarenal.

NERVOUS SYSTEM:—Skull thick in one case, chronic meningitis in two cases, chronic leptomenigitis in one case, chronic pachymeningitis in one case, and in a general summary we note that the meninges were involved in 100 per cent of the cases. BRAIN—atrophy in one case, choroids cystic in two, chromatolysis in two, cord lesion in one, edema of brain in one, ependymal granulation in one, cerebral softening in one, spinal fluid in excess, three; arteriosclerosis of cerebral vessels one; atheroma one. In 75 per cent of the cases we were able to demonstrate gross lesions which are more or less common to other forms of insanity, in 50 per cent of the cases microscopical changes, such as chromatolysis in the brain cells. In 25 were observed associated lesions in the cord.

SUMMARY:—The circulatory system—pericardium showed lesions in 50 per cent of the cases, the heart in 75 per cent, the large vessels in 100 per cent. Respiratory system—pleura showed changes in 100 per cent, and in each case we were able to demonstrate lesions in the lung varying from recent to chronic processes. Alimentary system—Peritoneal effusion in 25 per cent, lesions in the liver in 100 per cent of the cases, lesions ranging from recent to chronic conditions. Gall stones were observed in 25 per cent of the cases. Chronic disease of the pancreas in 50 per cent. Genito-urinary system—chronic cystitis in 50 per cent, chronic kidney disease in 75 per cent with a recent condition in the remaining 25 per cent. The ovaries and uterus showed lesions in both of the females posted. Glandular system—Spleen showed lesions in 75 per cent, the suprarenals in 25 per cent. Nervous system—Skull abnormal in 25 per cent, meninges were involved in 100 per cent, brain showed gross lesions common to other forms of insanity in 75 per cent, 50 per cent showed microscopical changes of the cells. Spinal fluid in excess in 75 per cent, 25 per cent showed associated lesions of the cord.

CONCLUSIONS.

1. Seventy per cent of paretics in the early stage of the disease showed a diminution of the free hydrochloric acid and total acidity.

2. The blood changes noted in the early stage of the disease were, (a) a polynuclear leukocytosis (50 per cent of the cases), (b) absolute diminution in the total number of lymphocytes (50 per cent), (c) an increase in the number of large lymphocytes (10 per cent.)

3. Eight per cent showed albumin, eight per cent casts, eight per cent showed bile pigment, eight per cent showed indican, and eight per cent showed pus cells.

4. The anatomical findings other than the brain were, as have been enumerated, similar to those found in other forms of insanity, but it is interesting to note the general vascular changes and its high percentage of frequency. The findings in the brain and cord in these four cases showed changes similar to other forms of insanity and we could not

identify the brains as paretic except in 75 per cent of the cases, which showed microscopically a marked perivascular lymphoid infiltration, which is not uncommon in other forms of insanity but is less frequent and less marked in degree, than has been noted in paresis.

It is indeed a pleasure to express our thanks to Dr. E. D. Martin, assistant pathologist, who has assisted in these examinations and to the members of the hospital staff for extending to us the courtesy of the wards.

THE HOMICIDAL AND SUICIDAL FULMINATIONS OF DEPRESSIVE NEURASTHENIA.

By C. H. HUGHES, M. D.,

St. Louis.

A PATIENT of this sort in the practice of a St. Louis city railway surgeon, lately shot his physician twice, saying he had not fulfilled his promise to make him all right after several weeks' treatment.

A patient of mine once came to me from another neurologist, saying the doctor had done him no good and was not trying to benefit him—only getting his money for nothing and he ought to fix him for it. While giving him static roller treatment to the cervico dorsal region, after the head breeze, I discovered a revolver in his hip pocket. Asking him why he carried it, he said for self-defense, but would not explain further. I detected no special evidences of delusion or suspicion, but he did not appear to me as the sort of patient I wished to continue treating after what he had said about my friend, the other doctor. My ethical sense became extremely active and though I advised him not to go back to the other doctor I advised him to take what I gave him, faithfully, and go home to a neighboring state, and arranged for sanitarium treatment away from home at a place conducted by a friend who had ample psychiatric experience. My treatment was Dr. Benjamin Rush's favorite ten and ten with potassium bitartrate, ten grains for two successive mornings, followed by a half grain of protoiodide, and five grains of salol with pepsin for the rest of the week and thirty grains of sodium bromide three times a day in plenty of pepsin essence.

I never directly heard from him again but learned that he had recovered. Other cases of this kind not carrying

weapons and without special morbid grievances have recovered. Others whom I could not effectually bring under chemical restraint, I have sent to sanitarium conducted by alienists, to whom they should be generally sent, especially when they become obsessed with impulses to suicide, as revealed in their conversation or in a record of previous attempts. The ordinary hospital is no place for them. They are the cases that jump out of hospital windows and otherwise destroy or maim themselves there.

Surgeons or ordinary physicians' offices are not the proper places for them and if a temporary attempt at treatment with codia and other agents that alter brain impression, pending neurone tranquilization and reconstruction with enforced sleep, lecethin and the bromides is made, they should be under the strictest surveillance of nurses and physicians, trained to their proper care.

The forerunner of manic depressive insanity with its perilous depression and brain storms is melancholic psychasthenia. These creatures of affliction are miserable beyond description. They have not so many, always, of the characteristic fears of the typical psychasthenic but their hypochondria and hopelessness tortures them. They cling to the physician for the relief they feel they so imperiously need. They must have it. They feel that the doctor can give it and if he fails, they feel hurt in mind, and morbid reasons for the physician's failure obtrude, with suggestions of indifference and unkindness or design. The medical man who dares to treat these cases should understand and get at once in close confidential touch with them and help them at once or place them so soon as possible beyond chance of harm to themselves or others. They sometimes, through fatal sequences, give rise to scandalous gossip regarding the physician, if the pathophobe is a woman, and passes into graver insanity and does not explain her grievance.

All cases are not for all physicians, especially for surgeons whose mental cast is to cut out trouble, who are more or less perfunctory and impatient with strictly medical illnesses that do not require or will not accept surgical methods.

Routine and perfunctory treatment will not answer the psychic needs of these cases. Their treatment must be sympathetic and promptly effective, while the physician is in the way with these depressives. Whatever is done, it were well if it were well done and quickly, or the patient safely placed in other hands. To lose their sympathetic touch and confidence is to lose the psychic support these patients require and under their morbid impulses imperiously demand, and this means to lose the strongest support in successful treatment. The long experienced alienist and neurologist might write volumes of interest to the earnest psycho-physical therapist about the management of these cases, for they are many and radically different from the average patient who has a really rational conception of himself, his physician and his ailment. The busiest and best informed alienists, who combine psychiatry with neuriatry in practice, can not always command the time to impart the instruction in the psycho-pathological aspects and complications of diseases which he daily sees, but which the average physician too often ignores, if he does not deny existing. Imagination attributed to patients' detail of symptoms and feelings has been the repository of too much clinical ignorance in practice. The delusional as well as the normal impressions of the patient are alike worthy of our consideration.

This patient had also previously complained of the doctor's having trifled with him in his treatment, a not uncommon suspicion with this class of patients. It is said that the doctor, naturally indignant and not rightly estimating the mental state of the case, suggested that "if the patient did not like what was being done for him that he should employ some one else," a kind of response any physician and all of us have probably given to certain exacting, carping, critical creatures who come to us with doubt of benefit and prejudice as to our medical skill, a doubt fostered too much by medical agnostic surgeons, accustomed chiefly to the knife as their main therapeutic reliance, from Oliver Wendell Holmes down to the late King Edwards' Surgeon Treves and even to the amiable agnostic Osler, whose sands

of life and usefulness have not yet run out, notwithstanding he has passed the age limit of capacity the newspapers have attributed to him.

It is not wise for the physician to say "throw physic to the dogs" even in mental cases. The physician in the case to which we are referring is reported to have said he did not know why this patient shot him. The reason to the patient's disordered mind is in the cold unsympathetic answer to "get somebody else to treat him," which, to this psychopath, though proper enough for some others, seemed a cruel, crushing response and an unfeeling repulse and refusal of the help he needed and felt that only this physician could give. These patients do not so much reason as feel. They feel and their morbid reason justifies their feeling and action.

Without censure to anyone, but with commiseration for this class of poor unfortunate over-wrought neurotics, whose only hope appears to them in our profession, we offer these comments from many decades of clinical experience. We must consider their malady of mind and others like them whose physical affliction is not alone to be estimated. Physical diseases have their associated mental states which medical men must, more now than in the past or up to now, consider.

If we turn them away, we should guide them to the sanitarium, and promptly. If we treat them, we must court their confidence, consider their quibbles and promptly impress them and their emotions in the direction of trustfulness and faith in us and in the curative skill they seek and we must promptly cure them or let other men and other environments accomplish what a wise professional enlightenment and high philanthropy demand in their behalf.

Here again is illustrated the contention of Plato that the great error of our day in treatment is that physicians separate the soul from the body. Plato appears to have had conceptions of psychotherapy which the exclusive wielder of the scalpel too much overlooks in remedial practice.

NEURASTHENIA.

BY GEORGE F. BUTLER, A. M., M. D.,

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NEURASTHENIA was early recognized by nosologists, as Muller (1) and Arndt (2) have demonstrated. Robert (3) of Edenberg over a century and a quarter ago distinguished between hysteria, hypochondria and neurasthenia, remarking that there are three classes of neuroses and that: "The complaints of the first of the above mentioned classes may be called simply nervous, those of the second in compliance with custom may be said to be hysteria; and those of the third hypochondriac." In 1851 Sandros entitled the nervous condition thus designated "the nervous state." Later Bouchut denominated the condition "nervosism" a term that still survives in French nosology. One conception of neurasthenia was much older than the observations of White would indicate. A condition entitled "nervous adynamia" developed according to the clinicians of the sixteenth century, on a basis of mixed nervous exhaustion and toxemia produced by the essential fevers, starvation, worry and allied causes, the condition being regarded as the basis of various neuroses arising after the conditions named and persisting in acute and chronic forms.

The term neurasthenia appears in Dunglison's Medical Dictionary nearly three quarters of a century ago, side by side with its German synonym "Nervenschwache." This synonym was in all probability a Pennsylvania Dutch equivalent, since as Dercum remarks, contemporary German dictionaries do not contain it. "Pennsylvania Dutch medical

practice contains not only folklore but science of the earliest centuries as well. The present clinical entity neurasthenia first demarcated by E. H. Van Deusen of Kalamazoo, Michigan, thirty-five years ago, was later forced into recognition by G. M. Beard (5) of New York. Both gave a clear cut conception of the neuroses. Van Deusen had found the condition in foreigners as well as Americans, and hence avoided the error into which Beard was led through the purely gratuitous assumption that Americans were a nervous race in the nosologic sense. Beard here confounded physiologic reaction with the idiopathic neurosis cant of the pessimist regarding the disappearance of the Golden Age leading to the assumption that the disease was a product of luxury. Like insanity it was, however, more frequent among the hard-working isolated female farming population and factory employees than among the middle class or wealthy city population. Indeed, as dispensary practice shows, the restlessness of neurasthenia often underlies the tramp habit and leads to undue accretion of rural neurasthenics in urban districts.

The present seeming frequency of neurasthenia is due to better diagnostic facilities arising from better treatment and to the partial disappearance of the unwholesome medical tendency to accept disease as existent only when due to a palpable organic lesion. Careful study of the literature of past centuries reveals great frequency of neurasthenia and hysteria, but these conditions were usually regarded as the product of idleness or "vapors" unless associated with organic disease. To this mental bias is due the success of the quack with so-called organic diseases diagnosed by reputable physicians.

"The man behind the knife" out for a fee was responsible for many "cures" by quacks, of patients who refused operations. One phase of the bias was well presented by Goodell (6) who speaking of nerve mimicry of uterine disease, remarks concerning the first seven decades of the 19th century, that: "Cauteries became the order, in fact, the ruling passion of the day. In the general enthusiasm it was soon forgotten that every mucous membrane secretes and

that it must of course give evidence of its own secretion, just as every nose contains its mucus. Hence, every examined womb being found to contain mucus was, as it were, invalidated—that is to say, it was put on the speculum list. Naturally, not a womb being found healthy from the speculum standpoint, this much abused organ was charged with being the cause almost of all the ills that female flesh is heir to, and was treated—that is to say, maltreated—for every imaginable disorder that could not be referred off hand to some other organ. The ball and chain of tradition still drags at the heel of this branch of science and the medical mind in close touch here with the lay mind, tends to give the reproductive organs undue importance—to attribute in fact, altogether too much to their influence. By a very large number of practitioners, even by specialists working in other fields of medicine, these organs are too often wrongfully made the scape goat for headaches and napeaches, for spineaches and backaches, for weakness of vision, for aural disturbance, for sore throat and weak lungs, for irritable heart and also for a host of so-called ‘uterine’ symptoms. Yet these very symptoms may be due wholly to nerve exhaustion or malnutrition of nerve centers and not to reflex or to direct action, from some real or some supposed uterine disorder. I say this advisedly because I too have thus erred and because hardly a day passes without my seeing cases of supposed uterine disease which have been treated for months—even for years—when the whole trouble or the most of it lies, not in the reproductive organs, but in the nerve ganglia. This abuse of uterine treatment through a mistaken diagnosis is, in my opinion, the great medical error of the day. Many of such mistakes of attributing too much to the reproductive apparatus have I seen in the practice of other physicians, but my own blunders in the same direction have made me feel very charitable toward them.”

Very unfortunately the idea attached to this group of symptoms (neurasthenia) is that the womb is at fault. A moral rape (this is too strong an expression, defloration would be sufficient) is therefore committed by a digital or speculum examination and two supposed lesions will be

found, first as a matter of course, the natural virginal ante-flexion, and secondly a slight uterine catarrh. They are at once seized upon as the prime factor and the patient accordingly subjected to a painful, humiliating treatment for false flexion and sham endometritis. Unimproved she drags herself from one consulting room to another and finally in despair she settles down to a sofa in a darkened room and becomes either the spoiled pet or the vampire of the family. The same views had been expressed earlier by Van Deusen, who pointed out the evils of local treatment alone. Neurasthenia, according to Beard (7) and Van Deusen, is a state which destroys the balance between waste and repair from nerve tire. Study of the phenomena of fatigue have extended these views. Pathogeny of this neurosis consists essentially in fatigue of the central nervous system through which its inhibitory influence on an excessive action of the local nervous system of the various organs and structures is checked, resulting in increased activity of the latter and their subsequent exhaustion.

The conditions underlying fatigue which produce neurasthenia are those which disturb the balance of the organism and thus interfere with waste and repair passing through a reversal of the law of evolution, and from the coherent heterogeneous to a lower type with increased expenditure of force. Every new mode of action of the bodily mechanism gives it, as Cowles says, a functional disposition to repeat the organic process. This, under the law of use and habit, constitutes the law of habit which prevails in all bodily and mental activities of the mechanism, and has a physiological basis. This law works with equal force in fixing a disposition to repeat disordered actions. The law of habit is fundamental to that of association apparent in all activities, its processes being inhibitions. The higher inhibitory control in the ideational processes manifests itself through the attention which is closely related to the motor apparatus; in its natural form attention being spontaneous or reflex. In the highest development of inhibitory power it is under the direction of the will and acts as voluntary attention.

Among the earliest indications of fatigue and exhaustion

of mental activities is weakening of the inhibitory and directing power of voluntary attention. The mechanism thus constituted and subject to certain laws that regulate its activity under due control has an indwelling motive force. The energy of muscle and nerve comes into play under the physiological law of storage and expenditure according to the fundamental law of all cell activity. Rest, sleep and nutrition contribute to the building up of complex cell compounds subject to physical and chemic laws, and the discharge of energy is accompanied by destructive chemic changes that yield toxic waste products, these processes occurring in both peripheral and central mechanisms.

The mechanism when put into continuous use under the foregoing conditions does not go on indefinitely upon being stimulated into activity, but manifests the phenomena of fatigue when subjected to prolonged exercise. The results of such use within proper limits may be regarded as normal. This is wholesome and power is gained in accordance with the law of physiological use, harmful results from disuse or overexertion constituting conditions of pathological fatigue.

Normal use with normal fatigue of both the peripheral and central mechanisms are inseparably accompanied by chemic changes in the parts exercised, and toxic products are formed in the tissues. The effects of fatigue can be studied only as including the direct results of the discharge of energy plus the toxic influence of the products of cell activity which emphasize and partly produce the fatigue of exhaustion. These elements exist in various proportions and under varying conditions. As between peripheral and central mechanisms fatigue in one will produce its phenomena in the other, the blood being the carrier not merely of nutritive material, but likewise of toxic elements from one part to another.

In the normal mechanism under normal use is maintained the balance of waste and repair. Healthy activity is sustained by the removal of the autogenous waste products and the supply of nutritive material under due conditions of rest and sleep. In studying the processes that produce

the phenomena of fatigue and the graver degree exhaustion, certain factors must always be kept in mind as possible in operation. Two of them are positive, viz., the direct result of discharge of specific cell energy and the reinforcing effect of the toxic products of tissue activity. The other two are negative, viz., the withholding of nutritive material in the circulating medium and the presence of toxic material in it which lessens the power of assimilation in the tissues.

Neurasthenia owes its peculiar mental complexion to the disturbances of the balance constituting consciousness. Neurasthenia causes disturbances of the co-ordination constituting the ego, which, as Kiernan remarks, oscillates between perfect unity, absolute inco-ordination and the intermediate degrees, without line of demarcation between normal and abnormal, health and disease, the one trenching upon the other, or else it ceases to be. The "ego" is the cohesion for a given time of clear states of consciousness, accompanied by other less clear and by physiologic states which, though not entering into consciousness, are even more effective than the conscious states.

Certain cortical areas exclusively connected with associating tracts have little if any direct connection with the bodily periphery. Such cortical areas and subsidiary associating tracts, bound into the higher unity of the cerebral hemispheres, constitute the material substratum of the "ego." Disturbance of the intricate relations involved in this is necessarily accompanied by disturbance of the "ego," or may render an "ego" impossible. On accurate connection of projection areas (passing outward to the periphery) with projection areas, and of these with "abstraction" areas, the faculty of logical correlation depends. Correction of the countless errors made during a lifetime is possible only by inhibitions, exercised by the association fasciculi. Correction with approaching maturity is delegated to the "abstraction" field, whose functions are ordinarily performed in an automatic manner.

Fatigue and other constitutional disturbances break up the associations constituting automatism. The individual then becomes actively conscious of the necessity of con-

trolling conceptions constantly received from sense impressions. The factor assumed to secure balance between associations is termed will or volition. This final act of consciousness results from a complex co-ordination of states, conscious, subconscious, or unconscious (purely physiologic), finding expression in action or in inhibition. Volition is an effect, not a cause.

The action of the heart, lungs or other organs registered in the unconscious phases of the "ego" does not normally form a conscious basis of mental states. Their disturbed action, destroying inhibitions, relegating them to the unconscious, raises them into the subconscious sufficiently to disturb the "ego," thereby creating states of anxiety, doubt, introspection and their emotional consequences.

These occur at first during sleep at the time of the lowest systemic vitality, producing the distressing dreams which so often precede the phobias and obsessions of neurasthenia. The dream impression is sometimes so vivid that a hypnagogic hallucinatory process remains in consciousness, often forming later a vague delusional or false memory.

Through the rhythmic law of the nervous system, circular neurasthenia, with its alternation of emotional depression and exaltation, often appears without external cause. Suppression of the exaltation phase produces hypomelancholia; of the depression, hypomania.

Disturbances of the automatic inhibitions permit the trivial, the immodest, the occult, and the criminal to rise into consciousness, whence the obsessions and phobias of neurasthenia. Of these there are two classes; the besetting and the impulsive. The first appears in conditions like the prying tendency into the trivial, or "Grubelsucht" of the Germans; the last in homicidal, suicidal, nymphomaniac, kleptomaniac, pyromaniac, and allied impulses.

From introspection and subconsciousness of organic disturbance comes the nosophobia of the neurasthenic. Nosophobia is too often brutally regarded as feigned hypochondriasis without reference to its underlying factor. Nosophobia differs from hypochondriasis in being a fear of a dis-

ease rather than a belief in its existence; it is hence more terrifying than hypochondriasis.

Nosophobia takes a special direction according as the quack consulted has an alcoholophobiac, pseudoreligious, toxicophobiac, psoric, "sexual purity," testicular, uterine "canalopath," myopath, osteopath, cylinder, catarrh, kidney, vermicular or reflex bias. The neurasthenic is peculiarly liable to suggestion, whence the crowds which were "cured" by Valentine Greatrakes (in the seventeenth century), as they are "cured" by Mother Eddy now.

Introspection through its numerous morbid resultants rising into consciousness inhibits symbolization, whence neurasthenic logorrhea. This is a word-diarrhea with decided constipation of ideas. Logorrhea is not necessarily abnormal since it often appears during medical discussions. Neurasthenic logorrhea often takes the direction of nagging.

Neurasthenia between the age of six and twelve, when the first signs of maturity (the permanent teeth) appear, often precipitates the onset of the mental state of puberty and adolescence. In this religiosity, undue conscientiousness, undue sexual consciousness, introspection, and nosophobia normally tend to appear.

During puberty and adolescence there is normally a struggle for existence between the cerebral and the reproductive system which tends to obtrude subconscious states upon consciousness.

From this struggle results a fear of the unknown which produces suspicious tendencies and pessimism. Suspicious tendencies and pessimism, with which they are so often associated, arise from states of anxiety resultant on instability of association, dependent on lack or non-use of association fibers. Pessimism, as Malgahaes has shown, is a state of nervous instability with alternations of irritability and prostration. The subject is supersensitive, impressions called forth are intense, and causing prolonged reactions, are followed by exhaustion. The state is characterized by a general hyperesthesia, which naturally results in an excess of suffering. From instability and hyperesthesia results discord between feelings themselves, between the feelings and

the intelligence, between the feelings, the ideas and volitions. Discord between the feelings shows itself in a great variety of paradoxes, contradictions and inconsistencies. To the pessimist, possession of a desired object does not atone for former privation. Pain or unsatisfied desire is replaced by the pain of ennui. With inability to enjoy what he has are coupled extravagant expectations regarding that which he does not have. He is extremely susceptible both to kindness and contempt. He passes suddenly from irritability to languor, and from self-confidence and vanity to extreme self-abasement. This intense sensitiveness results in intellectual instability, since it involves a great vivacity of the intuitive imagination which favors the setting up of extravagant ideals lacking in solid representative elements. Hence a gap opens between his ideal and the actual. He can never realize the ideal he pursues, and so his feelings are of a somber hue. From this excessive realism results a state of doubt, a certain distrust of all rational objective knowledge, expressed in occult fear and belief. It assumes another form in extreme subjectivism. The pessimist is haunted by images of the tiniest religious scruples, suspicions, fears and anxieties resultant in alienation from friends, seclusion, misanthropy. He has an incapacity for prolonged attention, a refractory attention and a feeble will. These result in inaction, quietism, reverie, self-abnegation, abolition of the personality, annihilation of the will, amounting sometimes even to poetic or religious ecstasy. Pessimism is frequently associated with a morbid fear of death (thanatophobia.)

Neurasthenia tinges the mental state of puberty and adolescence with undue egotism, whence the unpleasant obtrusiveness of what is called sexual neurasthenia. This is generally the morbid survival of the adolescent mental state after adolescence. Hebephrenia may result with its intense vanity, extreme selfishness, religiosity and perverted ethics, aural and visual hallucinations, shallow emotionalism and violent but controllable impulses.

Lust of the algophiliac type, which seeks satisfaction in pain (whether in cruelty towards others or in self-mutilation), often occurs prematurely between six and twelve or

during adolescence. This may arise from congenital deficiency of power to acquire that secondary "ego" best expressed by the Golden Rule, or from that decay of the secondary "ego" which neurasthenia, like other protracted invalidisms, occasions.

Neurasthenia during periods of involution like the climacteric and senility is marked temporarily by the mental characters of the period, followed or not by permanent mental breakdown. Climacteric neurasthenia, whether the climacteric be expressed in man by prostatic change or in woman by the menopause, presents the psychic features of ordinary neurasthenia plus exo-emotionality. This is likewise true of senile neurasthenia; the miserliness, collectivism, eroticism, etc., of old age may temporarily appear during it.

Neurasthenia in a degenerate (properly speaking, a hereditarily tainted defective) is accompanied by persistent obsessions of the besetting or the impulsive type. In such subject circular neurasthenia may become periodic and merge into circular insanity. Neurasthenia may precipitate paranoia in hereditarily tainted subjects of seemingly sound mentality.

Neurasthenia resultant on or complicated by phthisis has the suspicious capriciousness of the tuberculous. The same type of mentality occurs with uncompensated cardiac disease.

Neurasthenia produced by alcoholism or accompanied by it has the morbid jealousy, fears of poisoning and ideas about morbid sexual manipulation which characterize alcoholism.

Neurasthenics who have been exposed to syphilis, or believe they have been, have as the dominant note of their mentality syphilophobia.

Neurasthenia due to sunstroke, traumatism, lightning, or electricity, tends to develop suspicious mental states which very frequently form the basis of a secondary paranoia culminating in parietic dementia from extension of meningitic processes to the cortex. Exceptionally similar states are produced by the protracted nervous adynamia resultant on typhus and allied fevers.

The mental state of most pregnant women is essentially that of mild neurasthenia of the circular type. The so-called "longins" are besetting and impulsive types of obsessions. Phobias usually take the type of fear of "marking" the fetus. Pregnancy introduces a new force into woman's organization which disturbs the physiologic balance previously existing. Hence, strictly speaking, so far as the woman is concerned, it is a pathologic, albeit not a nosologic, state.

The psychology of neurasthenia expresses the nature and extent of a disturbance of the normal "ego" due to the influence of nerve tire primarily on the central nervous system; secondarily, through resultant uncontrolled action and its consequences on the nerve systems of the organs.

While nerve tire does not create organic changes, save in very few cases, and then only when assisted by toxic conditions, still nerve tire produces neurasthenic mimics of every constitutional disorder, particularly of the eye, ear, nose, throat, gastro-intestinal, renal, hepatic and genito-urinary tracts. What Goodell says concerning the utero-ovarian region, is equally true of the pelvis in the male. Nerve exhaustion of necessity must affect the nose and throat for similar reasons that it affects the genitals. The erectile tissue of the nose and throat was once closely associated with the genitals. As all erectile tissue implies a complicated nerve control, nerve tire easily produces various ear, nose and throat phenomena ascribed to "catarrh." The myriad types of so-called hay fever are an illustration of this. A respiratory neurosis which occurs very frequently in men and women about forty-five and after sixty, which is characterized by dyspnoea varying from puffiness resembling the "air hunger" of autotoxemia to true asthma, with its peculiar expectoration and crystals, is often a manifestation of nerve exhaustion. This last type may, through the periodic tendency of the nervous system, become true asthma. Accompanying these respiratory disturbances are sometimes experienced the sensations of organ displacement so often regarded as the first stage of Glenard's disease. These occasionally result from disturbed organ innervation arising

from nerve tire merging into consciousness. They are not evidences in the early stages of organ displacement so much as evidence of a loss of balance which disturbs organ orientation and creates states of anxiety. The older alienists suggested that such disturbances lay behind the displacement of the colon so frequently noticed in protracted melancholia. One phase of this organ disturbance arising from cardiac nerve tire is the heart pain and sense of weakness in neurasthenics which so closely resembles angina pectoris. This pain which has been called pseudo-angina is as fatal as the true angina pectoris, and bears the same relation as neurasthenic asthma does to fully developed asthma. Similar phenomena occur temporarily in a congerie of symptoms resembling exophthalmic goitre and bearing the same relation to that disorder as the asthma and angina do to the fully developed conditions. Neurasthenia may be complicated by and complicate every one of the organic disorders and then neither the neurasthenia nor the organic disease can be neglected. The patient should be under the control of a physician and during treatment should be severed from the environment in which the disorder has grown up. He should receive diet, hydrotherapy and balneotherapy and drug treatment indicated only in his particular case. The great results formerly attained at watering places were due to the partial application of these principles and to the medical control exercised. No rest cure is properly carried out where these principles are neglected. Rest cures under lay control whether of trained nurses or otherwise are simply quackish lounging places. That the training of a widely advertised system of rest cure is eminently deficient is shown in the fact that nurses trained under this system never detected the untoward actions of drugs used in treatment until decades after their existence had been pointed out by neurologists.

THE VALUE OF SYSTEMATIC TEACHING IN CASES OF DEMENTIA PRAECOX.

BY C. T. LA MOURE.

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IN the early days when the insane were merely housed, fed and given no adequate attention, nothing was done in the way of providing even occupation for them and the so-called insane asylums were, indeed, veritable mad-houses. Later when these deplorable conditions were changed and the insane were treated in a more humane manner, some attention was given to employing a few of the more quiet and tractable patients at certain occupations. At the present time, at least fifty per cent of the patients in the New York state hospitals are employed with the work about the hospitals. Many of these patients are selected for the different industries for the reason that, before admission to the hospital, they possessed a knowledge of, or had been employed at, the same occupation. We will all admit that it is a good plan for an insane patient to occupy his time and thoughts by some form of work, but for my part I cannot understand the logic of a physician who will advise a patient who becomes mentally ill from overwork at a certain occupation to continue that work while at the hospital. A change of occupation would be of more benefit as, for example, a bookkeeper who has become insane would improve more rapidly if given outdoor occupation while at the hospital than if kept at a sedentary occupation. The object of this article, however, is not to take up the subject of occupation of the insane as a class, but to show how valuable systematic occupation and instruction is for certain classes of insanity, especially the cases which have a tendency to become deteriorated and require hospital care for long periods.

In large hospitals for the insane a careful study of wards,

occupied by the so-called chronic insane, will show that the troublesome, untidy, destructive and idle are composed of a class more or less demented whose psychosis began as dementia praecox. These most troublesome cases are of many years duration and many of them have been in hospitals for periods of from ten to twenty years. Their case notes, almost from the time of their admission to the hospital, state, "patient is idle, destructive to clothing, makes frequent assaults, demented, careless and untidy." These notes from year to year vary but little, except to state that the patient is more demented and untidy. After making a comparison of cases of dementia praecox in one of the small hospitals during a period of fifteen years, where every case so diagnosed was started at some useful occupation and continued to be occupied during their residence at the hospital, I was much surprised to find that few cases were as untidy, idle, assaultive and vicious, as cases of the same type and duration of insanity who were transferred to our hospital from the larger hospitals. If the training of these demented cases to some steady occupation has such a beneficial effect that they continue to be useful in the different industries on account of the work performed, systematic instruction to the young cases of dementia praecox in the different industries, together with calisthenics, gymnastics, music and in some, reading, writing and common school subjects, would be valuable.

The writer became much interested in these cases and in January, 1909, selected ten women who had been in the hospital for periods of from three to ten years and who were of the apathetic, untidy, noisy, assaultive and idle class. With two untrained, new attendants the experiment was started. At first, in order to rouse them from their apathy and preoccupation, a basket ball was made use of and tossed to them; some paid no attention to it, others would pick it up and toss it back in a listless manner. Gradually they appeared to wake up and soon showed some animation in their movements.

Marching to music was then tried and it seemed almost impossible to get them to step in unison, but gradually this

was accomplished. Then singing and dancing were introduced and it was remarkable how soon they all learned to dance and danced well. A large, airy room was then procured and some gymnastic apparatus installed; then cloth for suits was provided and gymnasium suits were made by the scholars, assisted by the teachers. They all soon learned to hurdle, use the horizontal bar, the chest weights, rowing machine, dumb bells and medicine ball. As a result of the daily exercising they all improved physically as well as mentally. They moved with animation, their faces lit up and they even smiled and laughed which was a great contrast to their former state of apathy and indifference. They also took some pride in their dress and personal appearance. Their mannerisms disappeared and, in place of the former state of pre-occupation and unresponsiveness, they responded when spoken to and quickly complied with a request. When we consider that the thirty cases in the school at present are cases who have been in the hospital for periods of from three to ten years with a history of the disease of from one to three years before admission, it seems as if this latent mentality can be educated or better re-educated to an extent only time can tell.

During the time the school has been in progress marked improvement is apparent in every case. Several more cases have been added to the school from time to time until there are now thirty present daily. Since sixteen of these cases were, on account of their destructive and assaultive tendencies, kept on disturbed wards and improved so that they have been transferred to the best wards where they make no trouble and assist with the work, it seems as if the effort was worth while. These cases, with a few exceptions, were untidy and careless about their clothing and it was necessary for the nurses to comb their hair for them, but now they all comb their own hair and are so much more particular about their appearance that it is very gratifying. At present they are making their own dresses and doing their own washing and ironing.

The gymnastic exercises, dancing, singing, marching and out-door exercises take place daily from nine to twelve.

Then the school meets again at two p. m. and all work. They are taught to sew, to weave rugs, to make baskets and do fancy work. We would like to teach millinery, net weaving, stocking making, cooking and dining room work, so that each one will be able to assist in the different industries at the institution if they do not improve sufficiently to be cared for at home. Of course, from now on, the more acute cases of dementia praecox will be started in the school and more rapid improvement should be made.

Could we but get a few good teachers to carry on this work in each hospital, much good could be accomplished. The ordinary attendant or nurse is not equal to this phase of the work. What is needed are teachers who are trained for this particular line of work. As teaching has been found to be so valuable in the cases of the idiot and the feeble-minded to raise them up mentally, why should it not be valuable with the insane, especially the dementia praecox cases to prevent them going down mentally? I am positive that if the methods used in certain schools for feeble-minded were carried out in our institutions for the insane we would have greater success. It seems to me that it is just as important to prevent a patient who has had a good mind from becoming a hopeless dement as to work so hard to try and develop the feeble intellect of a patient who never had a good mind.

At present there is no place where suitable instruction is given, but the methods used in some of the schools for feeble-minded should be carefully studied and adapted to the needs of this class of insane. These teachers should teach the patients moral hygiene, habits of industry and proper methods of living, and should realize that the patient's improvement, and perhaps recovery, depends in a great measure on their tact in diverting the patients' thoughts, and this can be done in no better way than by suggesting some agreeable occupation or pleasant diversion.

In addition to these competent teachers on the wards there should be provided a competent teacher of calisthenics, who should have a special room provided in which to carry on this work. This room should be of good size, well lighted

and ventilated. If a separate gymnasium is not provided, certain gymnastic apparatus should be placed in this room. It should be the calisthenic teacher's work to rouse these cases from their apathetic state, so that when they become alert and active, the teacher on the wards can then instruct them in the different industries. Then small wards or cottages should be provided with a kitchen, dining room, work room and laundry for the women patients, where each one should be taught these different industries. For the men the different trades should be taught and facilities provided for that purpose.

Every hour of the day should be occupied by these young cases of dementia praecox in some form of diversion or occupation with short periods for rest, as is done in some boarding schools. In pleasant weather out-door amusements and occupations, such as basket ball, tennis, hand ball, volley ball, running and jumping, gardening, caring for lawns and out-door work should take the lead. !

About 25 per cent of the admissions to the hospitals are dementia praecox cases, and, as only about one-sixth of this 25 per cent recover, more effort should be taken in treating these cases in the beginning of their mental breakdown.

Dr. Adolph Meyer gives as a cause for dementia praecox faulty education and improper environment. Taking his view as to the cause for the present, it is the duty of the hospital to try and overcome this faulty education and attempt to re-educate these cases to proper methods of thinking and living. In the course of time the public will become educated along these lines and will train their children more carefully and, with the assistance afforded by the schools separating the defective pupils from the others and providing separate classes for them, we will expect fewer cases of dementia praecox. The family physician should also have a better conception of dementia praecox so that he could make an early diagnosis and send the patient for treatment before the trouble has progressed very far.

No alienist will assert that it is not harmful to these young cases to come in daily contact with chronic and well-

advanced cases of insanity, as they are impressionable and soon take on characteristics of the advanced cases and imitate them. The present custom of assigning cases of dementia praecox to large wards, where it is impossible to give these patients individual attention, is to be deplored and efforts should be made for a better classification, which is only possible by the construction of small wards or, better still, small cottages and providing more physicians and attendants to care for them.

This work would cost considerable for the extra care and instruction and more individual attention, but it would be more than compensated for by the cases which improve sufficiently to be cared for at their homes, by the work performed by those who remain in the hospitals and are by this instruction made industrious and neat and orderly, instead of becoming untidy, vicious and destructive, as is the result under our present methods. These untidy, vicious and destructive patients yearly cost the state much for the clothing, furniture and articles destroyed, besides much for close supervision to prevent assaults.

If these cases are taken in the early stages of the disease after the acute symptoms have disappeared and followed up in this manner along the lines of re-education, there will be more recoveries, more will improve so as to be cared for at their homes and the remainder will be a quiet, industrious class during their residence in the hospital. In a very short time the character of the chronic wards will have entirely changed.

The present condition of ward after ward of idle, demented and vicious patients will be replaced by industrious and contented patients, somewhat demented, perhaps, but useful to the hospital, and the so-called chronic disturbed wards will be a thing of the past. Every effort should be put forth to improve these cases, as it is this type of case that remains in our hospitals year after year and causes much of the increase in the insane population. Early and persistent treatment of these cases of dementia praecox along the lines herein suggested will surely be productive of good results.

IS GENIUS A NEUROSIS, A SPORT OR A CHILD POTENTIALITY DEVELOPED.*

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PRECOXITY in genius, according to C. Lombroso,¹ allies it to insanity. Dante composed a sonnet to Beatrice at seven and Tasso at ten. Comte and Pascal were thinkers at thirteen, Fournier at fifteen, Niebuhr at seven, Jonathan Edwards at twelve, Michael Angelo at nineteen, Gassendi at four (preached), Bossuet at twelve and Voltaire at thirteen. Pico di Mirandolo in his childhood knew Latin, Greek, Chaldaic, Hebrew and Arabic. Goethe wrote several languages before the age of ten. Wieland at seven knew Latin, meditated an epic at thirteen and published a poem at sixteen. Lopez de Vega wrote his poems at twelve. Calderon published his "Chariot of Heaven" at thirteen. Kotzeboe attempted comedies at seven and wrote his first tragedy at eighteen. Victor Hugo wrote "Irtameus" at fifteen and published before the age of twenty "Hans, of Iceland," "Bug-Jargal" and his first volume of "Odes and Ballads." Lamennais wrote the "Words of a Believer" at sixteen. Pope wrote an "Ode on Solitude" at twelve and at sixteen his "Pastorals." Byron made poetry at twelve and published his "Hours of Idleness" at eighteen. Moore translated "Anacreon" at sixteen. Meyerbeer was an excellent pianist at five. Claude Joseph Vernet drew in crayons at four and was celebrated as a painter at twenty. Wren invented an astronomical instrument and dedicated it in Latin to his father at four. At thirteen Ascoli published a work in Wallachian and Trioul'ian dialects. Metastasius improvised at ten. E. Q. Visconti was a marvel of intelligence at six-

*Continued from *The Alienist and Neurologist*, May, 1910.

teen months and preached at six years. Fenelon preached an excellent sermon at fifteen. G. Wetton could translate Latin, Greek and Hebrew at five and at ten knew Chaldaic, Syriac and Arabic. Mirabeau preached at three and published books at ten. Handel composed a Mass at thirteen, at seventeen composed "Florinde" and "Nero" and at nineteen was a theatre director. Raphael was renowned at fourteen. Relief de la Bretonne had read much at four, seduced girls at the age of eleven and at fourteen composed a poem on his first twelve mistresses. Eichhorn, Mozart and Eybler gave concerts at six. Beethoven composed three sonatas at thirteen. Weber's opera, the "Wood-Maiden," was publicly presented when he was fourteen years old. Cherubini enthused the populace with a Mass at thirteen. Bacon conceived his "Novum Organum" at fifteen and Charles XII planned his conquest at eighteen.

The definition of "precocity" requires, according to Havelock Ellis,¹ a little more careful consideration than it sometimes receives at the hands of those who have inquired into it, and that when we have carefully defined what we mean by "precocity" it is its absence rather than its presence which ought to astonish us in men of genius. Judging from the date before us, there are at least three courses open to a child who is destined eventually to display pre-eminent intellectual ability. He may (1) show extraordinary aptitude for acquiring the ordinary subjects of school study; he may (2), on the other hand, show only average, and even much less than average, aptitude for ordinary school studies, but be at the same time engrossed in following up his own preferred lines of study or thinking; he may, once more (3), be marked in early life solely by physical energy, by his activity in games or mischief, or even by his brutality, the physical energy being sooner or later transformed into intellectual energy. It is those of the first group, those who display an extraordinary aptitude for ordinary school learning, who create most astonishment and are chiefly referred to as proving the "precocity" of genius. There can be no

1. A Study of British Genius.

doubt whatever that even in the very highest genius such extraordinary aptitude at a very early age is not infrequently observed. It must also be said that it occurs in children who, after school or college life is over, or even earlier, display no independent intellectual energy whatever. It is probable that here we really have two classes of cases simulating uniformity. In one class we have an exquisitely organized and sensitive mental mechanism which assimilates whatever is presented to it, and with development ever seeks more complicated problems to grapple with. In the other class we merely have a sponge-like mental receptivity, without any corresponding degree of aptitude for intellectual organization, so that when the period of mental receptivity is over no further development takes place. The second group, comprising those children who are mostly indifferent to ordinary school learning, but are absorbed in their own lines of thought, certainly contains a very large number of individuals destined to attain intellectual eminence. They by no means impress people by their "precocity"; Scott, occupied in building up romances, was a "dunce;" Hume, the youthful thinker, was described by his mother as "uncommon weak-minded." Yet the individuals of this group are often in reality far more "precocious," further advanced along the line of their future activities, than the children of the first group.

It is true that they may be divided into two classes, those who from the first have divined the line of their later advance, and those who are only restlessly searching and exploring; but both alike have really entered on the path of their future progress. The third group, including those children who are only noted for their physical energy, is the smallest. In these cases some powerful external impression, a severe illness, an emotional shock, contact with some person of intellectual eminence—serves to divert the physical energy into mental channels. In those fields of eminence in which moral qualities and force of character count for much, such as statesmanship and generalship, this course of development seems to be a favorable one, but in more purely intellectual fields it scarcely seems to lead very often

to the finest results. On the whole, it is evident that "precocity" is not a very valuable or precise conception as applied to persons of intellectual eminence. The conception of physical precocity is fairly exact and definite. It indicates an earlier than average attainment of the ultimate growth of maturity. But we are by no means warranted in asserting that the man of intellectual ability reaches his full growth and maturity earlier than the average man. And even when as a child he is compared with other children, his marked superiority along certain lines may be more than balanced by his apparent inferiority along other lines. It is no doubt true that, in a vague use of the word, genius is very often indeed "precocious;" but it is evident that this statement is almost meaningless unless we use the word "precocity" in a carefully defined manner. It would be better if we asserted that genius is in a large number of cases mentally abnormal from the first, and if we were to seek to inquire precisely wherein that mental abnormality consisted. With these preliminary remarks we may proceed to note the prevalence among British persons of genius of the undefined conditions commonly termed "precocity."

It is certainly very considerable. Although we have to make allowance for ignorance in a large proportion of cases, and for neglect to mention the fact in many more cases, the national biographers note that 292 of the 1,030 eminent persons on our list may in one sense or another be termed precocious, and only 44 are mentioned as not precocious. Many of the latter belong to the second group, as defined above—those who are already absorbed in their own lines of mental activity—and are really just as "precocious" as the others; thus Cardinal Wiseman as a boy was "dull and stupid, always reading and thinking;" Byron showed no aptitude for school work, but was absorbed in romance, and Landor, though not regarded as precocious, was already preparing for his future literary career. In a small but interesting group of cases, which must be mentioned separately, the mental development is first retarded and then accelerated; thus Chatterton up to the age of six and a half was, said his mother, "little better than an absolute fool,"

then he fell in love with the illuminated capitals of an old folio, at seven was remarkable for brightness, and at ten was writing poems; Goldsmith, again, was a stupid child, but before he could write legibly he was fond of poetry and rhyming, and a little later he was regarded as a clever boy; while Fanny Burney did not know her letters at eight, but at ten was writing stories and poems.

Probably the greatest prodigies of infant precocity among these eminent persons were Cowley, Sir W. R. Hamilton, Wren, and Thomas Young, three of these, it will be seen, being men of the first order of genius. J. Barry and Thirlwall were also notable prodigies, and it would be easy to name a large number of others whose youthful proficiency in learning was of extremely unusual character. While, however, this is undoubtedly the case, it scarcely appears that any actual achievements of note date from early youth. It is only in mathematics, and to some extent in poetry, that originality may be attained at an early age, but even then it is very rare (Newton and Keats are examples), and is not notable until adolescence is completed.

The very marked prevalence of an early bent towards those lines of achievement in which success is eventually to be won is indicated by the fact that in those fields in which such bent is most easily perceived it is most frequently found. It is marked among the musicians, and would doubtless be still more evident if it were not that our knowledge concerning British composers is very incomplete. It is specially notable in the case of artists. It is reported of not less than 40 out of 64 that in art they were "precocious;" only four are noted as not being specially precocious.

According to C. Lombroso the tardy development of men of genius is explained by the absence of favorable circumstances and by the ignorance of parents and masters and the obtuseness or even stupidity where the obstruction of genius is present. Thiers, Pestalozzi, Wellington, Du-Guesclin, Clark, Burns, Fresnel, Dumas Pere, Humboldt, Sheridan the elder, Boccau, Pierre Thouar, Linnaeus, Volta and Alfieri were regarded as dullards at school. Klaproth, the Orientalist, was a backward student; taught himself

Chinese. Flaubert learned to read with difficulty and could not write when he created characters who held long talks. Cabanis was regarded as hopeless and left to study as he would.

The influence of environment in producing seeming precocity and in arresting sex instinct awakening in sacrifice to it appears markedly in John Stuart Mill.¹

James Mill, the father of John Stuart Mill, was the eldest son of a small shoemaker whose wife was believed to have belonged to a better class of society. It was she who set her heart upon bringing up her eldest son as a gentleman, and to be a gentleman he must be educated. James Mill took kindly to education, and developed into a most remarkable man. He married a woman who was not his intellectual equal and the marriage was never happy. The salaried positions that he had on his marriage slipped through his fingers, and during the years that he had only his pen as a free lance to depend upon, nine children were born to him. The eldest of these was John Stuart Mill, who from his earliest age was subjected to a most remarkable experiment in education. Fortunately, as the nine children grew the father's circumstances improved.

From the moment that John was born his father had decided what he should be. He started learning to read when he was 2 years old; he began the study of Greek when he was 3. When he was 7 he had read the whole of Herodotus, much of Xenophon, and the lives of other philosophers; when he was 8 he had read Plato and other classics. Besides reading in Greek and Latin the boy Mill had undergone a strenuous course in English reading, especially in English histories and biographies. That Mill flourished under this severe mental treatment proves that he must have had an unusually vigorous constitution; also that he inherited the brilliancy of his father's mind.

When he was 6 years old the father was taken ill, and Jeremy Bentham, his warm personal friend, offered to undertake his guardianship, and to teach him to make

1. Letters of John Stuart Mill edited by S. R. Elliott.

all proper distinctions, "such as between the devil and the Holy Ghost," and to give him sound floggings if they were necessary. By the time Mill was 11 years old he had written a Roman history and "An Abridgment of the Ancient Universal History," a "History of Holland," and a "History of the Roman Government." With all this learning Mill's education did not degenerate into mere blind cramming. He studied intelligently and understood what he was studying. Fortunately, at the age of 14 Sir Samuel Bentham, a brother of Jeremy Bentham, took him for a visit to the south of France. The visit was to have lasted six months but was extended to twelve. He continued to study, taking up chemistry, zoology, metaphysics, and logic, together with the French language, in which he became proficient, but it was a new scene, a new manner of life and fortunately, not as strenuous as under his father's tutelage.

So far from being, as Carlyle alleged, a mere "logic chopping machine," Mill was—as Carlyle himself well knows—a man of such intensity and depth of feeling as is rarely to be met with. In vain do we search in his character for those weaknesses, whether of emotion or of will, that are so often found to accompany transcendent intellectual power. Mill's superiority of intellect was not derived from any sapping of other departments of his mind. He was not, like Herbert Spencer, deficient in power of application to disagreeable subjects, nor in the active and volitional side of mind; nor was he, like Jeremy Bentham, or James Mill, or Alexander Bain, a man of low emotional susceptibility. Mill's emotional history is perhaps the most remarkable element of a remarkable personality. His upbringing, as we have seen, was carried out without the smallest reference to emotional cultivation. From the earliest years he was absorbed in intellectual pursuits; there was no outlet for the natural affections of his childhood. True, he had brothers and sisters; but his relation to them was rather that of teacher than of playmate. "I never was a boy," he wrote sadly; for almost his entire waking hours were applied to study, and relaxation would have brought down upon him the austere

censure of his father. That he was bound to his father by strong ties there can be no question. But the ties were not the ties of love; they were constituted by the cold sentiments of respect and awe, and the enthralling influence of a powerful personality upon the unformed mind of a child. Yet the large endowment of feeling which Nature had implanted in his youthful mind was not extirpated by this radical treatment. It was, perhaps, overlaid and rendered latent for a time. But as the boy grew older it gradually asserted itself with increasing insistence.

In a letter to Carlyle he writes:

I never indeed was tolerant of aught but earnest belief, but I saw, or seemed to see, so much of good and truth in the positive part of the most opposite opinions and practices, could they but be divested of their exclusive pretensions, that I scarcely felt myself called upon to deny anything but denial itself. I never made strongly prominent my differences with any sincere, truth loving person; but held communion with him through our points of agreement, endeavored in the first place to appropriate to myself whatever was positive in him, and, if he gave me any encouragement, brought before him also whatever of positive might be in me, which he till then had not. A character most unlike yours, of a quite lower kind, and which if I had not outgrown, and speedily too, there could have been little worth in me. Do you remember a paper I wrote in an early number of *Tait*, reviewing a book by a Mr. Lewes (a man of considerable worth, of whom I shall have something more to say yet). That paper paints exactly the state of my mind and feelings at that time. It was the truest paper I had ever written, for it was the most completely an outgrowth of my own mind and character; not that what is there taught was the best I even then had to teach, nor perhaps did I even think it so, but it contained what was uppermost in me at that time, and differed from most also that I knew in having emanated from me, not, with more or less perfect assimilation, merely worked itself into me.

I never, or rarely, felt myself called upon to come into collision with any one, except those to whom I felt myself

altogether superior, and with whom, if I had any intellectual communion, it was not for the sake of learning but of teaching. I have not till lately, and gradually, found out that this is not honest; that although I have not positively, I have negatively, done much to give to you and to others a false opinion of me, though the deliberation with which you form your opinions, always waiting for sufficient grounds, has, I think, protected you from forming an actually false opinion of me, and I have only to accuse myself of not having afforded you sufficient means of forming the true. Whether if you knew me thoroughly I should stand higher, or lower, either in your esteem or in your affection, I know not; in some things you seem to think me further from you than I am, in others perhaps I am further from you than you know. On the whole I think if all were told I should stand lower; but there cannot fail, any way, to be much which we shall mutually not only respect but greatly prize in each other; and after all, this, as you and I both know, is altogether of secondary importance, the first thing being, that we, and all persons and all things, should be seen truly, and as they are."

Mill had very decided views on matrimony and apparently believed that men had the better of the marriage ceremony. He wrote and signed a statement of his views on his marriage with Mrs. Taylor. "And in the event of marriage between Mrs. Taylor and me, I declare it to be my will and intention, and the condition of the engagement between us, that she retains in all respects whatever the same absolute freedom of action and freedom of disposal of herself, and of all that does or may at any time belong to her, as if no such marriage had taken place; and I absolutely disclaim and repudiate all pretense to have acquired any rights whatever by virtue of such marriage."

In 1854 Mill began to keep a diary in which he might commit one thought to paper each day. This diary was began on January 8th and ended on April 15. It was a collection of thoughts, naturally valuable and interesting.

"Feb. 20—Whenever I look back at any of my own writings of two or three years previous they seem to me like the writings of some stranger whom I have seen and known

long ago. I wish that my acquisition of power to do better had kept pace with the continual elevation of my standing point and change of my bearings towards all the great subjects of thought. But the explanation is that I owe the enlargement of my ideas and feelings to her influence, and that she could not in the same degree give me powers of execution.

"Feb. 22—Carlyle is abundantly contemptuous of all who make their intellects bow to their mural timidity by endeavoring to believe Christianity. But his own creed—that everything is right and good which accords with the laws of the universe—is either the same or a worse perversion. If it is not a resignation of intellect into the hands of fear, it is the subordination of it by a bribe—the bribe of a being on the side of Power—irresistible and eternal Power."

(TO BE CONTINUED.)

SELECTIONS.

CLINICAL NEUROLOGY.

THE HYPOPHYSEAL ADIPOSEO-GENITAL SYNDROME.—Two papers by Launois and Cleret (*Amer. Jour. Med. Science*,) have for their object to show how lesions of the pituitary gland, associated with developmental, pathological, or functional troubles of the genital apparatus, produce in the connective tissues an enormous deposit of fat. The authors, admitting our complete ignorance of the physiological relations that may subsist between the genital organs and the hypophysis cerebri, content themselves meantime with describing briefly the features presented by twelve cases of disease showing the three general characters mentioned above, and give to such cases the general name of this syndrome. The cases affected comprised six women, two girls, three men, and a boy, and presented features suggestive of acromegaly on the one hand and features suggestive of Dercum's disease on the other. Twenty figures are given in the text, which help to convey a clear impression of the syndrome. As regards the fat deposit, it is general, both on the surface and in the body cavities, and enormous in amount, so that one woman weighed 155 kilos. The signs of sexual dystrophy varied, but were, generally speaking, those of arrested development, while the pituitary body was found to be much enlarged, or the seat of tumour formation. Microscopic examination of the genital and pituitary glands is, in most of the cases, still wanting.

DIABETES FOLLOWING PSYCHIC SHOCK.—The influence of trauma in cases of diabetes has been placed at from one to nine per cent., in the majority of instances, the injury is to the head. Roepke, of Melsungen, gives a case due,

he believes, entirely to the psychic shock which occurred to a motorman who was on the point of running into three children. Not only did a fatal and rapid diabetes run its course, but a pulmonary lesion of tuberculosis developed. Neither morbid process had existed at the time of the accident. It is shown by Roepke (*Revista de Sanidad Civil*, August 20, 1909) that the patient had been decidedly stout before, weighing around 125 kg. Intense headaches came on soon after the shock, and disturbances of sensation in the lower extremities.

DIABETES MELLITUS AS AN INFECTIOUS DISEASE.—*The Hospital*, April 3, 1910, has the following:—As the result of a series of experiments with the *saccharomyces cerevisiæ*, a fungus found in the urine of every diabetic patient, Dr. Alfred King has come to the conclusion that diabetes is a fungus disease. In a paper published in the *Monthly Cyclopædia and Medical Bulletin* he points out that these organisms are capable of forming enzymes which convert glycogen and certain foodstuffs into glucose. He has found the fungus in large quantities in the blood of 16 cases of diabetes by cultural methods. Estimation of the opsonic indices of blood to the organisms gave results which fairly represent the physical condition of the patients examined. In six cases treated with vaccines of *saccharomyces cerevisiæ*, the opsonic indices of the patients were brought up to the normal after three or four doses. At the same time the patients were much relieved of their symptoms, thirst becoming less, the amount of urine and the sugar output decreasing, and a feeling of well-being taking the place of the former lassitude. In treating diabetes the author recommends the use of antiseptics to remove the fungus; the employment of vaccine therapy, which causes neither local nor general disturbance, to increase the phagocytic action of the leucocytes; and the administration of suitable diet, tonics, alkalies in acidosis, deep breathing exercises to increase oxidation and the elimination of carbon dioxide; and suitable surgical and antiseptic measures in dealing with boils, carbuncles and gangrene.

HEADACHE IN DEMENTIA PRECOX. (By Dr. O. Halberstedt, *Revue Neurologique*, September, 1909.) Dr. C. E. Riggs, of St. Paul, abstracts for the *St. Paul Med. Jour.* the following:

Five cases of dementia precox in all are cited of which headache formed a distinct symptom.

. In the first case of R., in the early stages of the disease, during alternating periods of calm and agitation, the patient suffered from headache in the forehead, and at the base of the temples, mainly in the daytime. The disease ran its course to complete childishness and catatonic excitement.

Case B. Intensely religious; showed her first symptoms in a convent, imagining herself under the influence of a demon, and finally showing suicidal tendencies, which necessitated her commitment to an asylum. Here somewhat later these conditions gave way to a chronic state in which she was calm. Generally taciturn, able to work but constantly imagined herself turned into a demon. She had pupillary troubles, bilateral mydriasis and sluggish reaction to light. The headache in the beginning was very violent, necessitating giving up work, and she complained of the pain in the forehead and back of the eyes. At first appearing at night. In these last years it is always in the morning, ending about noon. Sometimes it is accompanied by stomach disturbance.

Case D. Began with attacks of violent agitation alternating with periods relatively calm. At this time there was a feeling of emptiness in the head. She rapidly became mentally incapable and was sent to the hospital. Here she had headache of extreme violence which seemed accompanied by paresthesia of the scalp, for she would drag at her hair and even pull it out. The acute stage soon passed into the chronic condition.

In the fourth case the chief signs were ideas of persecution, hallucinations and sensorial illusions, suicidal propensities, unequal pupils. Two years after the appearance of these symptoms a severe headache occurred and without doubt was a part of the hallucinations of general sensibility. There were queer feelings in her knees and in other parts

of her body. Her head, she said, felt as if broken in pieces. The pain was intense, seated in the parietal and occipital regions and more violent in the day time than at night; indeed, it rarely lasted all night. The patient attributed this to electric discharges caused by her enemies employing wireless telegraphy. There were further hallucinations of hearing. Morbid mannerisms, stereotyped movements and such fatigue that she could not work. The final condition was that of a paranoid form of dementia precox.

The fifth case again presents hallucinations of hearing and a belief by the patient that she has been magnetized. The headache is very intense, but experienced only in the morning. It is felt in various places, sometimes in the forehead, sometimes in the occipital region, again back of the eyes. The suffering is great and the patient attempts to relieve it by holding the head in the hands or binding it tightly with a bandage. According to these observations the intensity of the headache varies. Sometimes it is a merely queer feeling. Sometimes painful sensations of pressure as though there were a helmet of lead upon the head, as one patient described it. Sometimes it is a moderate pain, while frequently the pain is so great that it seems to resemble a cerebral tumor.

The locality of the pain is worthy of note. Sometimes it is in the area above the eyes. Two cases experienced great pain at the back of the eye cavity, but any region may be involved. The character is indeterminate, but at times it is a surface pain seated at the roots of the long hairs, analogous to hallucinations of general sensibility.

The headache is most often noted at the early stage of the disease, when the patient is regarded as a neurasthenic. But the observations of the writer show that at the period when the disease is clearly developed this symptom is present, often associated with hallucinations of general sensibility. The frequency of this headache among those afflicted with dementia precox is very great and it has probably generally escaped notice because the patients are not apt to speak of it unless questioned. One patient for two months kept his head bound up and when questioned explained

that it was to alleviate his headache, while some of the patients pull out their hair, thus hoping to relieve the pain.

Tomakbury explains the headache on the theory of auto-intoxication and thinks that this is only one sign of the auto-toxic process of dementia precox. This may be true in certain cases, especially at the beginning of the malady, but in cases where it is connected with pains in other parts of the body, so that the patient considers himself electrified or magnetized it is a question of something altogether different, but what is not yet known. In certain cases it would seem like a passing pressure in the brain betraying itself among other things by this headache.

The writer gives this last as a simple hypothesis upon his part, but he urges the value of this symptom from a clinical standpoint.

A CRITICAL STUDY OF THE SENSORY FUNCTIONS OF THE MOTOR ZONE (Pre-Rolandic Area); MORE ESPECIALLY STEREOGNOSIS. By Herman Hoppe, A. M., M. D. *Jour. Nerv. and Ment. Dis.*

An analysis of the literature, with a report of three cases investigated electrically, tending to show that the stereognostic function is not entirely in the superior parietal lobe.

Case 1. Right brachial Jacksonian monoplegia, with *loss of attitude* sense, the other sensibilities being unaffected; weakness of right face and tongue, amnesic aphasia, paresis of right leg. Patient refused operation, and died six weeks later, after a month of cerebral compression. Post mortem: A non infiltrating tumor the size of a hen's egg, between the internal capsule and cortex of the ascending and superior parietal convolutions, which were as thin as paper.

Case 2. Subcortical tumor of ascending frontal and prefrontal opposite the arm area, with asteriognosis of the right hand. It had begun with various attacks of paresthesia and Jacksonian convulsions of the right arm and also face; numb feeling in the right finger tips with marked astereognosis; later, the right fingers became paretic, and also the mouth. At operation, sub-cortical solitary tubercle was

removed about an inch from the surface; it ran backwards and inwards about an inch towards the ventricle. After the operation, there was persistent marked astereognosis, *without loss of muscle and position senses*; spacing sense was slightly diminished.

Case 3. Left brachial Jacksonian monoplegia, without sensory loss. At operation, the centres for flexion and extension of the hand were located by faradism and excised. This caused complete astereognosis and paralysis of left arm. *Other sensations unaffected.*

The author believes that the two last cases show that astereognosis, when not caused by loss of sense of position and "muscle sense," points to a precentral lesion. It is a pity that the investigation of "spacing sense" is not more completely reported in these cases as was done by Prince. For Hoppe makes it clear that his cases were not merely asymbolic like that of Poggio, in which two cysticerci were found in this same area as Case 3. Implication of the corona radiata can hardly be invoked; for in Case 3 the excision was carefully limited to the cortex. It is unfortunate that no mention is made of the patient's "sense of effort," which might contribute to the elucidation of what is a most valuable case.

TOM A. WILLIAMS.

GENERAL PARALYSIS OF UNUSUALLY LONG DURATION. New York Neurological Society. M. J. Karpass. *Journal of Nervous and Mental Disease*, June, 1909. Two CASES, ONE WITH NECROPSY.

The first case remains in good physical health twelve years from onset. It began abruptly with a long period of excitement and persecutory hallucinosis. The dementia had features seen in dementia precox; but physical symptoms and lymphocytosis made the diagnosis of paresis.

The second case died of another malady *eighteen* years after the onset of paresis, in spite of a virulent infection, chronic alcoholism and strenuous life with emotional stresses. It was a cerebral type in which convulsions appeared early and progressed with remissions, the dementia was of long standing. The post mortem showed moderate haziness of

the pia, including that of the cerebellum, slight(!) atrophy of the brain (1120 grammes:) Histologically diffuse glial hyperplasia in the first frontal with irregularities of the cortex and loss of nerve elements and of course the usual peri-vascular plasma and lymph cells.

Four cases of long duration studied histologically.

Chas. B. Dunlap.

Case 1. A man committed suicide at 49 after *eleven* years of paresis. He had amnesia, irrational and persistent delusions, mental deterioration, one convulsive period; the lips trembled, speech was thick, writing unsteady, knee jerk exaggerated.

Post mortem. Little gliosis and slight increase of vessels, with very little periarterial plasma cell exudate, moderate loss of parenchyma.

Case 2. Died from choking, after *eleven* years of tabo-paresis. Onset acute and very expansive, pupil and knee reflexes absent. After a seizure and four years of deterioration, there was little further change.

Post mortem. Considerable atrophy of brain and thickened pia, thinning of columns of Goll. The histological changes slight, as in the last case.

Case 3. Aged 59 on admission. After two years improved and went back to work. After five years, readmitted, confused, loquacious and tremulous. Died at seventy-four after progressive deterioration,. Towards the end, a temporary right hemiplegia. *Fifteen years duration.*

Post mortem. Slight atrophy; lymphoid and plasma cells in pia, but blood vessels only slightly infiltrated, except in medulla and in temporal lobes; slight senile changes.

Case 4 lasted *twenty-three* years. Began suddenly at thirty-seven with violent delirium, which soon quieted, leaving iridoplegia, hemiptosis, tremor and dysarthria. Expansiveness alternated with depression, and dementia progressed to annihilation. Various passing cranial nerve palsies occurred. The report states that the patient died at seventy, (a duration of thirty-three years. T. A. W.)

Post mortem. Marked atrophy, opaque pia, granular

ependyma, atheroma, diffuse, very slight, but characteristic histologic changes.

TOM A. WILLIAMS.

THE FUNCTIONS OF THE PITUITARY GLAND.—*The Hospital* finds in the *Bulletin of the Johns Hopkins Hospital* the following from the researches of Drs. Crowe, Cushing and Homans into the functions of the pituitary body. Previous investigators have not been in agreement as to the physiological essentiality of the hypophysis cerebri, due largely to the difficulty of removing the structure without damaging also the brain and other important parts. The most elaborate precautions were taken to exclude all such sources of error; and the authors agree with Paulesco on this point, holding that a state of apituitarism due to complete removal leads inevitably to death with a peculiar and characteristic train of symptoms which they term cachexia hypophyseopriva. But even in adult animals death need not occur so rapidly as Paulesco thought; and puppies may even remain apparently normal for at least three weeks before the terminal phenomena appear. The same symptoms, at about the same intervals, follow the removal of the whole of the anterior pars alone, even when the posterior lobe is left intact. On the other hand, removal of the posterior lobe (except a small part of the pars intermedia) not only leads to none of the manifestations of cachexia hypophyseopriva, but does not appear to affect the physiological balance of the animal in any symptomatic way, unless convulsions and excessive sexual activity—which have been observed in a few cases—can possibly be ascribed to this operation.

A STUDY IN RENAL SENESCENCE.—(Laboratory of the Henry Phipps Institute; read before the Philadelphia Pathological Society, Feb. 24, 1910.) In a study of the kidneys four years ago Joseph Walsh, M. D., of Philadelphia, thought he noticed a fact which I had never heard mentioned, namely, that as age advanced there was a thickening of the interstitial tissue at the apex or papillary end of the pyramids and that this thickening was reasonably uniform. Further study on one hundred and fifty kidneys from individuals

of all ages dying from many different diseases (though the majority died from tuberculosis of the lungs) added confirmation. I then showed a number of unselected specimens, the identification of which was withheld, to Dr. McFarland, who was so successful in determining the ages of the patients by the criterion mentioned that he prepared notes thereon for publication.

A specimen from the child one month old showed through a two-third lens the tubules at the apex of the pyramids practically in juxtaposition, with so little interstitial tissue between them that it was practically invisible; in a 9-year old specimen there were one or two fine lines of interstitial tissue between the tubules; in a 27-year-old specimen three or four lines; in a 35-year-old specimen five or six; in the 69-year-old specimen eight to ten lines and in the 99-year-old specimen ten to twenty lines.

This study revealed that this thickening of the interstitial tissue was not dependent on the accompanying pathologic condition of the kidney, but occurred apparently only as a result of age. All kinds of pathologic conditions were found in the one hundred and fifty kidneys studied, namely, cloudy swelling, acute parenchymatous nephritis, chronic parenchymatous nephritis, focal interstitial nephritis, the various kinds of general interstitial nephritis, amyloid degeneration, pyelonephritis, etc. It was found that pyelonephritis and hydronephrosis injured the pyramids and increased the interstitial tissue in them to such an extent as definitely to obscure the comparatively slight increase due to age; in these cases, therefore, the age could not be told from the appearance.

The author summarizes:

1. There is a gradual increase in the amount of interstitial tissue at the apex of the renal pyramids so uniform with advancing age that the age of the individual is evident from the amount of interstitial tissue found.

2. This relation of the amount of interstitial tissue to the age is lost in cases of pyelonephritis and hydronephrosis; and modified by interstitial nephritis, though this

modification can be accounted for, so that the age remains evident.

The paper in extenso appears in the *Jour. A. M. A.*, June 4, 1910.

UREA IN THE CEREBRO-SPINAL FLUID.—According to Dr. J. Froment, estimation of the urea content of the cerebro-spinal fluid by means of lumbar puncture may furnish important clinical evidence in the diagnosis of cerebral conditions of uræmic origin. The cerebral symptoms, be they convulsive or paralytic, may present nothing distinctive in themselves, and the diagnosis must often rest upon other pathological evidence on the part of the urinary or cardiovascular systems. Examination of the cerebro-spinal fluid, too, in regard to its molecular concentration, percentage of chlorides or toxicity does not disclose any typical changes in these conditions, but estimation of the percentage of urea appears to yield more definite indications. In normal conditions the amount of urea in the cerebro-spinal fluid is practically negligible, amounting to about 15 centigrammes and never reaching 1 gramme per 1,000. On the other hand, in uræmia with cerebral symptoms it often amounts to 1.5 gramme, and even 4.5 grammes, per 1,000. The author gives details of two cases in which a diagnosis founded on the urea content of the cerebro-spinal fluid was confirmed at the autopsy. The first case was that of a woman who was admitted to hospital in a condition of stupor, and soon developed coma. Jaundice followed, accompanied by a right hemiplegia. The urine contained a large amount of albumen. The cerebro-spinal fluid was quite clear and did not show a trace of urea. At the autopsy the kidneys were small, the aorta markedly atheromatous, and the brain showed foci of softening scattered throughout. The second case was a man aged 52, who had had epileptic fits three months previously and well-marked albuminuria. He was in a condition of stupor, quite indifferent to his surroundings, with respirations much accelerated; 30 c. c. of cerebro-spinal fluid were withdrawn by lumbar puncture, yielding 4.5 grammes of urea per 1,000. The patient died after a

convulsive fit, and the autopsy showed a chronic nephritis but no cerebral lesion. In regard to prognosis the author thinks that if the quantity of urea exceeds 4 grammes per 1,000 a fatal issue is indicated, whereas 1 or 2 grammes per 1,000 point to a more favorable prognosis.—*The Hospital*.

TUBERCULAR AND INSANE INHERITANCE OF THE DIATHESIS OF PHTHISIS AND INSANITY; a Statistical Study based upon the Family History of 1,500 Criminals. (Draper's Company Research Memoirs; Department of Applied Mathematics, University College, London. Goring, C.

Working on this material by the usual biometric methods, Dr. Goring reaches the following conclusions:

(1) The tubercular diathesis is inherited, and the intensity of the inheritance factor lies between 0.4 and 0.6, being thus about the same as with all other physical characters in man.

(2) The prevalence of tuberculosis in the population—taking the duration of individual life as the unit—lies between 8 *per cent.* and 10 *per cent.*, and is probably nearer the lower limit.

(3) In the class dealt with there is no evidence of marital infection.

(4) There is no definite evidence that the correlation between parents and offspring is greater in the poorer classes, where environment would increase the liability to infection.

(5) The importance of the hereditary factor as opposed to direct contagion in the causation of phthisis is further supported by the facts (*a*) that the prevalence of phthisis amongst children of infected mothers is not appreciably greater than it is amongst the children of infected fathers; (*b*) that the prevalence of phthisis amongst workers exposed to constant infection in a consumption hospital has been found to be not significantly greater than amongst individuals with the same degree of diathesis in the general population.

(6) The criminal data confirm Heron in his conclusion as to the inheritance of the insane diathesis, and present a

correlation between parents and offspring sensibly the same as the correlation in phthisis.

(7) The prevalence of insanity—the life of the individual being taken as unit—appears to be somewhat greater (lying between 3 *per cent.* and 4 *per cent.*) than the value assumed by Heron, or else it is greater in criminal stock as distinguished from the normal population.—*W. C. Sullivan, in Jour. Ment. Science.*

CRIMINOLOGY AND CRIME PATHOLOGY.

HOMICIDE IN THE U. S.—10,000 homicidal crimes were committed in the United States during the year 1909, less than 2 per cent. of the perpetrators of which were convicted. 118 homicidal crimes committed in Chicago, Ill., during the year 1909.

Twenty of the same kind of crimes, for the same period, committed in London, England, nearly 50 per cent. of the perpetrators of which were convicted. *London is four times the size of Chicago.*

Homicidal crime has increased 50 per cent. in the United States since 1889. Thereof the government gives ratio of convictions of 1 1-3 per cent. Same ratio for Germany, 95 per cent.

Bar Russia and homicidal crime in the United States exceeds the total of that of any *ten* civilized countries.

Estimated that 75 per cent. of the apprehended thieves and thugs of the "Red Light Districts" of New York City are freed through political or other "influence."

Estimated that 350,000 in the United States whom the law does not touch, choose and pursue criminal careers.

National debt, \$964,000,000. Annual cost of crime, \$1,373,000,000.

As to the *why* of it, "The Crime Problem," by Col. V. M. Masters, Military Instructor New York State Reformatory, will enlighten you.

CLINICAL PSYCHIATRY.

IS INSANITY INCREASING?—Amos J. Givens of Stamford, Conn., answers the question as to whether insanity is on the increase by giving statistics from various countries and states of the Union, which show that there is a steady increase in the number of cases under public care. Urban conditions of stress and strain tend to increase the number of cases of insanity, and this is combined in the United States with the large number of aliens who come to us from poor and unhygienic surroundings. Hereditary predisposition, alcoholic excesses, and influenzal poisoning are assigned as among the most fruitful causes of insanity. Syphilis with alcohol is responsible for most of the cases of paresis. Insane heredity is in a large proportion of cases due to the use of alcohol in excess by the ancestors. According to the views of the author prohibitory legislation and local option have in no way improved the conditions as to the use of alcohol. He sees the solution of the problem of stopping its use in a law prohibiting the sale of liquors until after they have been ten years in storage, and the poisonous qualities have been changed so as to render the liquor comparatively harmless. Beer should not be sold until it has been stored for six months. High grade liquors properly made and aged lose much of their poisonous qualities. Early treatment of insanity should be encouraged in every way.—*Medical Record*, April 9, 1910.

CRIMINAL PSYCHOLOGY.

THE PROBLEM OF THE CRIMINAL.—*The Newark Evening News* thus truly speaks: The advanced view of the problem of the criminal, and the one which is being accepted by intelligent men, is that he should be returned to the world after his prison term, not a moral and physical wreck, but if possible, healthier in body and mind. In the new penitentiary being built in New York to take the place of the unhealthful and demoralizing Sing Sing, not all the ideas of

the modern penologist will be practiced, but the health of the inmates will be considered and the men released will not have the germs of tuberculosis in their systems, as is now the case with many of them. New York is also establishing a colony for the mentally defective on the pavilion system now in use at modern hospitals for the insane and the tuberculous. Some such plan is sure to be followed in future in the imprisonment and reformation of law-breakers. By it the less hardened would be segregated and would issue forth repentant, and most important of all, with some of their self-respect remaining. When justice learns to punish a man without stripping him of all his self-respect, the problem will be a long way toward solution.

NEURODIAGNOSIS.

AN IMPORTANT URINARY TEST.—The simplest and most obvious things are sometimes the easiest overlooked. Hundreds have observed, for instance, the red line found in urine in contact with cold nitric acid, and paid no attention to it. It remained for Davbarn (*Archives of Diagnosis*, April) to suggest the cause of its presence, and to emphasize its grave importance. He has found the line present in every case of insufficient action of the liver, when there was present persistent constipation; or in women having either a subacute or chronic pelvic peritonitis or pyosalpinx, and with pus or other excrementitious material continually diluting the blood. The line is to be seen with or without the presence of the white line of coagulated albumin, in the former case being immediately above the albumin. He observed that in old people with retained fecal masses the red ring was invariably present. Upon their expulsion the red line would quickly disappear.—*Lancet-Clinic*.

RELATIONS OF ACUTE POLIOENCEPHALITIS WITH INFANTILE PARALYSIS.—A. Delearde and André Paquet (*L'Echo Medical du Nord*, *Medical Record*) consider that infantile paralysis and acute polioencephalitis are identical diseases

with different localizations. The etiology of these diseases is not established as yet, but they give every reason to believe that they are similar to the other infectious diseases. Both begin with a febrile stage; a stage of paralysis follows in which the paralysis develops quickly; then comes the stage of regression of paralysis and permanent deformity. In poliomyelitis there is an inflammatory process affecting the bulbar motor nuclei, while in infantile paralysis the motor nuclei for the muscles of the limbs are affected. Both involve motor nuclei. In poliomyelitis we may have the eye nuclei involved, with fixity of the globe, ptosis, strabismus, and inequality of the pupils. When the hypoglossus is affected we get troubles of deglutition. When the recurrent laryngeal nerve is involved there is failure of the voice; if the pneumogastric is affected we have failure of respiration and rapid pulse with sudden death. The paralysis is flaccid, with atrophy of muscle, and failure of osseous development. The faradic contractility is lost in permanently paralyzed muscles, and galvanic reaction of degeneration is present. Postmortem there is found inflammation of the bulbar nuclei. All these symptoms are common to both the diseases under consideration.

LACTO-THERAPY.

THE CHICAGO HEALTH DEPARTMENT opposes agitation for the modification of the milk ordinances of that city so as to permit of the feeding of milch cows on "wet malt." The agitators threaten to carry this subject to the City Council, notwithstanding that the recent Milk Producers' Convention unanimously indorsed the following last statement of the commissioner, read at the convention February 10: "Dairy chemists agree that milk from cows fed on 'wet malt,' brewery grains, slops, etc., while it may contain the normal amount of butter fat, is deficient in solids—not fat, the proteids, etc.—which are essential nutritive constituents of whole and wholesome milk. Such material affects the health and vitality of the animal fed upon it and makes it more sus-

ceptible to disease. Out of 61,030 milch cows inspected last year by the department dairy inspectors every case of sickness—from anthrax, tuberculosis and actinomycosis, or 'lump jaw,' to the milder affections—was found in herds fed upon 'wet malt.' No case of illness was found in herds which were not so fed. This fact, which was noted early in the inspection work, led to a series of bacteriologic examinations by the director of the department laboratory, the results of which showed an enormous preponderance of the peptonizing and putrefactive organisms in the milk of cows fed on such material. It is owing to the presence of these organisms that such milk does not sour, but putrefies in a short time with a vile odor. No amount of pasteurizing will make such milk wholesome, because the toxins or poisons produced by these organisms are not affected by a pasteurizing temperature. When fed to the young this milk causes marasmus or 'wasting,' infantile diarrhea, dysentery, and all the symptoms of chronic ptomaine poisoning. Its use for human food should be positively prohibited." As a matter of record the milk from 544 dairies where "wet malt" was being fed was excluded from sale in Chicago last year, and the prohibition is still being enforced.

NEUROPATHOLOGY.

CENTRAL NERVOUS SYSTEM CHANGES IN INFECTIONS, HYPERTHYROIDISM, ANEMIA AND SURGICAL SHOCK.—Dr. Crile, of Cleveland, presenting the cytopathology of these morbid states before the Amer. Surg. Assn. last May, said that the neuropathological cytology had been instigated by the belief that when the function of any organ was disturbed that some pathological changes could be found, and as no gross lesions were found in the central nervous system in the conditions mentioned, although their functions were disordered, the cytology had been studied. In uncomplicated surgical shock from trauma, the brain cytology had been studied and showed the size of the pyramidal cells to be increased, the nucleus to be larger than normal in

proportion to the size of the cell, the limiting membrane of the nucleus to be ruptured and uneven in contour, the Nissl staining bodies to be larger and the nucleolus to be abnormal. Even in the fatal cases of shock not all of the cells were thus involved, but more of the cells were destroyed the more severe the shock. In anesthesia similar changes were found, but the changes under nitrous oxide and oxygen were only one-fourth as frequent as under ether. More changes in the cortex and fewer in the cord were found than in shock. In Graves' disease, anemia, and the infectious diseases similar cell changes were found. In peritonitis, toxemia, streptococcus sepsis, and chorea, the same types of changes were found in the cells. In cases of intestinal gangrene after the blood supply had been cut off for a certain length of time, if the blood circulation through that intestinal loop were restored, the patient died quickly. If the blood supply were not restored the patient died later. The expressed juice from the loop of the gangrenous gut if injected into the lumen of the gut elsewhere or into the subcutaneous tissues, or into a vein, produced destruction of the brain cells. Therefore, in operating on strangulated intestine it was very deleterious to express the contents of the gut into the healthy gut after releasing the constriction and much wiser to block the circulation to that loop before operation on the intestine. In Graves' disease the cell destruction was most marked in the cortex, less in the cerebellum, and still less in the medulla. The cellular pathology did not afford a diagnosis of the condition but allowed a class diagnosis. The several conditions also augmented each other in their action, so that it was not wise to add anesthesia to a case that already was suffering from infection, hemorrhage, trauma and fear.

NEUROPHYSIOLOGY.

THE INFLUENCE OF THE BRAIN ON THE DEVELOPMENT AND FUNCTION OF THE MALE SEXUAL ORGANS (L'influenza del cervello sullo sviluppo e sulla funzione degli organi sessuali maschili.)

J. H. MacDonald excerpts the following for the *Jour. Ment. Science* from Riv. Sper. di Freniat, by Ceni. Professor Ceni has during recent years been studying the influence of the cortical centres upon the phenomena of generation and perpetuation of the species. In a former communication, he described the effect of operative destruction of the cerebral cortex upon the sexual life and general health of fowls, and drew attention to a peculiar condition of cachexia accompanied by extreme atrophy of the testicles which beset the animals operated upon long after they had recovered and lived in an apparently normal manner for a period of one to two years.

The present communication gives the result of a large number of experiments which aimed at determining the nature of the atrophic process in the sexual organs, the relation between the atrophy and the operation (removal of one hemisphere down to the basal ganglia), and the influence exerted upon the atrophic process by the age, and more especially the precise state of development, of the genital organs with respect to the time of operation.

Sixty young cocks about three months old, *i. e.*, with immature sexual organs, and forty-one about eighteen months, sexual organs completely developed, had one cerebral hemisphere removed during the months of maximum sexual activity (April and May). Of the former, twenty-one died during the operation, and thirteen from shock within ten days. The remaining twenty-six recovered from the shock and survived the period of life in which the sexual organs normally acquire their full development.

Ten of these twenty-six failed to reach normal development, notwithstanding the healing of the wound by first intention and an abundant ingestion of food. They remained in a state of physical torpor and skeletal deficiency, accompanied especially by a notable arrest of development of the external sexual features. The bright feathers and the crests and wattles of normal cocks either failed to grow or appeared atrophic and scanty. They did not crow nor did they give any sign of sexual instinct whatsoever. In three which came to the *post-mortem* table several months

after the operation, the recognition of sex was impossible from external features. These ten cocks died or were killed at periods from three to nine months after operation. In all the testicles were found greatly atrophied, and in some cases almost irreconizable. Those animals which were not killed died in a state of severe cachexia, which supervened in the latest period of their lives.

The remaining young cocks, having recovered from the traumatic shock, underwent an apparently normal evolution, and differed little, or not at all, from control animals, either in external appearance or in sexual instinct and capacity. Four were killed, five, eight, ten, and fourteen months respectively after operation, and whilst in the best of health. Their testicles were found to be normal in colour, consistence, volume and weight. Three fell into a state of progressive cachexia after fourteen to nineteen months of health and normal sexual activity. The testicles of these were markedly atrophied. The remaining nine were still alive after two years of almost normal sexual activity. The microscopic findings are still more noteworthy. Even in those which died within ten days after operation modifications were present in the size and form of the seminiferous tubules and the spermatogenic cells. The spermatozoa were much fewer in number than in control cases, and showed evidence of degeneration. In those which died from the third to the eleventh month after operation with external features of sexual infantilism, the microscope revealed a state of arrested development and even retrogression of seminiferous tubules and spermatogenic elements.

In those which developed normally and were killed at intervals from five to fourteen months after operation, the intimate structure of the testicles was normal.

In the case of the three young cocks which died in a state of cachexia after a long period of health and virility, remarkable alterations were found, indicative of an extremely destructive and atrophic process, affecting both the true glandular elements and the interstitial tissue.

Of the forty-one adult cocks, eleven died during the operation and nine during the following fifteen days without

recovering from the traumatic shock. In the latter, the testicles presented a degree of atrophy, increasing from the third to the fifteenth day. Three died after twenty-two, twenty-five and twenty-seven days in a state of progressive marasmus after having partly recovered from the shock, and the testicular atrophy in these was more marked.

Nineteen survived and gradually re-acquired their former vital and sexual activity in about thirty-five to forty days. Of these, five were killed after they had recovered from the shock, but before the sexual instinct was regained (four to twenty days), and in them a marked degree of testicular atrophy was found. Four were sacrificed from the thirtieth to the fifty-seventh day, *i. e.*, during the period of re-awakening sexual instinct and restoration of physical condition. Their testicles were normal in consistence and colour, but slightly below normal in weight. Five were killed after four, five, seven, ten and thirteen months respectively, and in them the testicles presented a normal appearance. Of the remaining four, two died in a state of progressive cachexia after eighteen and twenty-five months respectively of health and sexual activity, and in them an enormous degree of atrophy of the testicles was found. The other two were alive and well after more than two years. The histological findings in the testicles of these adult cocks are perhaps even more striking, and are fully described and figured by the author. In the case of the five killed after four to thirteen months, whilst in a state of complete restoration, the microscopic appearances were normal. In all the others atrophic and degenerative processes were in evidence. Even during the first few days after operation, the form of the seminiferous tubules and the disposition of the mobile elements (spermatocysts and spermatids) is notably altered as well as the pre-formed spermatozoa. When the traumatic shock is followed by progressive marasmus the above changes are accompanied by a necrobiotic process affecting all the elements of the tubules—fixed and mobile. The spermatocysts and spermatids are always most affected and first destroyed. When shock is recovered from and health gradually restored, the histological and physiological

condition of the testicles returns gradually to the normal. When, after a long interval of health, the state of cachexia supervenes, the necrobiotic process in the testicles is extreme, and under the microscope the spermatogenic elements are seen to be completely destroyed and the interstitial tissue profoundly altered.

It is evident from these experiments that there is an intimate connection between cerebral integrity and normal sexual function. The precise nature of the connection it is as yet impossible to define. The results of cerebral destruction are both *immediate* and *remote*. In Ceni's opinion, the immediate phenomena cannot be related to traumatic shock, which is sometimes entirely or almost absent, especially in adult fowls, whilst in some cases they remain very prominent long after shock has been recovered from. They might be thought to be due to loss of the habitual physiological cerebral equilibrium necessary for the regulation of the general metabolism. This, Ceni, remarks, is simply an hypothesis to be accepted with the greatest reserve. The remote effects are no less enigmatical. They certainly cannot be ascribed to disturbance of cerebral equilibrium, for the sexual organs have previously re-acquired their normal functional activity, notwithstanding the loss of a hemisphere, whilst the animal has shown, during a long intervening period, an almost normal equilibrium in the organic interchange. These animals, however, have a shorter life than usual, and die in a state of precocious vital exhaustion that reminds us of the involutionary phenomena of senility. This idea is merely a tentative explanation, and further researches are needed to throw light on these complex and important biological questions.

THE INFLUENCE ON THE FUNCTION OF THE TESTICLES EXERTED BY SOME SUBSTANCES WHICH ACT ESPECIALLY UPON THE BRAIN (Coffee, Veronal, Absinthe). (L'influenza di alcune sostanze d'azione prevalentemente cerebrale sulla funzione dei testicoli (caffè, veronal, absinthe).)

The following epitome is also from C. Ceni, Riv. Sper. di Freniat and *Jour. Ment. Sci.* This paper gives an account of

some experiments carried out on dogs to determine whether substances which alter the cerebral function without producing organic lesions in the brain are capable of inducing functional changes in the testicles. Coffee was administered to three and veronal to two dogs, in doses sufficient to produce exterior manifestations, without compromising the life of the animals, for varying periods of time. The microscopic examination of the nervous system was negative in each case, whilst the findings in the testicles were always positive. The severest alterations followed the administration of coffee. The seminiferous tubules and spermatogenic elements at first show signs of involution or simple atrophy, and in the later stages a truly necrobiotic process is evident, resembling that found after ablation of a cerebral hemisphere. In the testicles of the two dogs subjected to the action of veronal the changes were less severe, and indicated an arrest of the spermatogenic process without determining a true involution of the elements.

In the case of dogs poisoned during fifteen days with absinthe, the histological findings were similar but less marked. Why coffee should exert such a powerful action on the function of the testicles as compared with veronal and absinthe it is difficult to explain, especially when we contrast the external manifestations of poisoning by these substances. It cannot be a direct action, else we should expect to find (a) the severest changes following absinthe, the deleterious effects of which, on the organism generally, are well recognized; (b) gross changes in the central nervous system in the case of coffee and veronal, which act selectively on the cerebrum. Ceni suggests that the action may be mainly *indirect*, and dependent on functional disturbances in the central nervous system.

NEUROTOXICOLOGY.

TOBACCO IN RELATION TO INSANITY (Der Tabak in der Aetiologie der Psychosen). (Wien. klin. Rund., No. 48-50, 1909.) Näcke, P. Trans. by Havelock Ellis in *Jour. Ment. Sci.*

The author prefixes to his cases an interesting summary of the somewhat conflicting modern opinions on tobacco as a factor in the causation of insanity. He thinks the tendency is to assign to tobacco a less serious part than formerly, greater care being taken to distinguish between the *post hoc* and the *propter hoc*. Aetiology is so complex that it is difficult to assign a precise place to nicotine. The abuse of tobacco can only in very rare cases be alone a sufficient causation of a psychosis. Näcke believes, however, that very exceptionally the chronic abuse of tobacco may produce a condition clinically corresponding to general paralysis (for he is not one of those who consider syphilis as an absolutely essential factor of this disease), and he accepts the case brought forward by Krafft-Ebing. He also agrees with Arndt and Schüle that, as in other cases of chronic poisoning, tobacco may enfeeble the nervous system, act as an intellectual and moral depressant, and even by affecting the germ-cells influence offspring. But, even as a merely co-operating cause, the misuse of nicotine in the production of psychosis is very rarely seen. In thirty years' psychiatric activity among a vast number of cases, Näcke has seen very few cases in which tobacco, to his knowledge, played any part at all, and never any case of pseudo-paralysis thus caused. He brings forward two cases he has recently met with in which tobacco was influential. The first was that of a cigar sorter (from age of sixteen) in a tobacco factory, and himself a great smoker. There was some insane heredity on paternal side but otherwise his record was good; no alcohol, syphilis, or trauma. He was, however, rachitic. At the age of twenty he became nervous, displayed fears and anxieties (at first in regard to diet), then highly irritable, and later violent and destructive, finally presenting "a classic picture of amentia," with confusion, hallucinations and corresponding delirium. Two years after outbreak he left the asylum cured. On the physical side tobacco had at the outset produced definite neurasthenic symptoms as well as some amblyopia. The chief cause of the psychosis, Näcke concludes, was the abuse of tobacco. The second case was somewhat similar, though here the heredity was fairly sound,

and smoking only began at nineteen, from which age cigarettes were consumed in great excess. At twenty he fell on a staircase and struck parietal region, being rendered unconscious, and later had another somewhat similar injury to head. There were neurasthenic symptoms, later culminating at age of twenty-five in a sudden outbreak of amentia, and for four days he was completely amnesic. Recovery took place four or five weeks later. In this case, Näcke holds that abuse of tobacco was one of several depressing conditions influential in bringing on the attack.

How does the use of tobacco affect the insane? Näcke has never seen any seriously bad results. Nor has he seen any evil effects from suddenly breaking off the habit. Rather more than half of the patients on the men's side at Hubertus-burg smoke, nearly a quarter of these at their own expense. The cost per head for the others is less than four shillings a year, and Nacke considers that the money is well spent, as no luxury is cheaper or more appreciated.

Finally, Näcke brings forward a case of acute nicotine poisoning due to idiosyncrasy. The young wife of a clergyman went with her children to tea at the schoolmaster's, a man who smoked cigars all day long. Everything in the house smelled and tasted of tobacco, and on returning home the clergyman's wife suffered from headache and vomiting. For a week she was unable to eat and for a month she was pursued by the hallucinatory odor of tobacco. One of the children suffered to a slighter extent.

NEUROTHERAPY.

THE IMPORTANCE OF PEDIATRICS AND THE POSITION OF SURGICAL PEDIATRICS IN THE COLLEGE CURRICULUM.—The importance of pediatrics as a study in our medical schools and recognition of the surgical diseases of children as a department of study was among the admirable features of the report on curriculum presented at the meeting of the Association of American Medical Colleges held in Baltimore in March. The report placed the minimum number of hours to be devoted to pediatrics at 509, which is an increase of 50 per cent. over

the present requirement of the Association, and yet is a very modest share of the 4000 hours of the clinical years (the third and fourth years) of the college course. Dr. H. D. Arnold of Boston was chairman of the sub-committee on curriculum for the clinical years, and Dr. S. W. Kelley of Cleveland member representing pediatrics. The report goes on to say, "The allowance for pediatrics is intended to include instruction in the exanthemata. In many other ways medicine and pediatrics overlap. Useless repetitions can only be avoided by a proper understanding between the teachers of these two subjects, and a certain elasticity should be allowed a school for the purpose of assigning time to one subject or the other according to where the borderland subjects can best be taught. In the same way pediatrics and surgery touch and overlap. In one subject or the other the surgery peculiar to children should receive attention. Valuable suggestions in relation to the teaching of pediatrics will be given in an appendix to this report."

THE OIL OF THE MEXICAN CROCODILE FISH is said to have more than emollient and lubricant virtues. Internal medicinal qualities superior to those of the best Norwegian cod liver oil are claimed for it. The natives of the state of Tabasco use and relish it as a food.

SPINAL CORD CHANGES FOLLOWING AMPUTATIONS.—Switalski reported (in 1900 *N. Y. Med. Jour.*) the results of an examination of five spinal cords removed from subjects upon whom amputation had been performed—4 amputations of the thigh and 1 of the leg. In every case there was found atrophy of one-half of the spinal cord corresponding to the side of the amputation, both the white and grey matter being implicated in the atrophy. In 3 cases the atrophy was traceable from the lumbar part of the cord to the dorsal region, and in 2 cases up to the cervical region. Coincident with the atrophy there occurred a sclerosis of the posterior columns—in 3 cases in all levels of the cord, in 2 cases in the cervical region. While the hemiatrophy showed a tendency to diminish from below upward, the sclerosis of the posterior

columns increased from below upward. Pierre Marie also drew attention to the occurrence not only of atrophy, but also of sclerosis after amputation, and states that such sclerosis may be noticeable even on the opposite side of the cord. These results ought to be borne in mind in later autopsies.

THE PATHOGENESIS OF TABES AND ALLIED CONDITIONS OF THE CORD. (*Brit. Med. Jour.*, June 1, 1901), Watson held that tabes is not a "nervous disease in the sense usually comprehended, and the lesions in and around the vessels are of primary importance, the lesions of the neurones being determined by local interference with the blood supply. This does not exclude the consideration of a varying vitality of the neurones as an important factor in the etiology of the disease. Further he states that there is good ground for the belief that the condition is dependent upon a chronic autointoxication, the vascular lesion being to some extent general, but tending to be more advanced locally, and that the more advanced local changes determine a failure of nutrition in the adjacent nerve elements.

The *Alienist and Neurologist* would like further recent light on this subject in its Original Department or Selections.

R. S. CARROLL, *Iowa A. M. A.* ON THE THERAPY OF WORK.—Man is mentally, morally and physically so attuned that when disordered his perfect restoration demands intelligent readjustment of each element. The derangements of the mechanical workings of the body have been subject to increasing surgical skill until we invade every precinct of the body. But this has had its evils, and until recently practically normal organs were sometimes removed and exploratory incisions were made for their "mental effect." The modern physician with his immense therapeutic armamentarium, must still feel the stigma of empiricism as he faces many of the diseases of internal medicine, and one reason is that he has ignored that principle of life connected with, dominating and making the real body, the psyche. The neurologist has been pleading that a certain percentage

of invalids are psychically ill. Emotional shock is interpreted through the physical sensations, the individual becomes self-centered, the physician who has a powder for every pain fails to apply his psychology and the patient after passing through the hands of the physician, the oculist, the abdominal surgeon, and the osteopath finally finds cure in the negations of Eddyism, and medicine is rightfully discredited. The neuropath may also be of the hereditary type, and then the case is difficult. The acquired form may result from exhaustion, intoxication, or have its origin in the owner's brain. Nerve integrity is reduced by profitless introspection, morbid self-consciousness, ultra-sensitiveness, self-depreciation, cynicism, pessimism, doubt, and, most baneful of all, fear in its many forms. The call is for men practiced in the arts of medicine, who, in addition, are students of the human mind. The length of the list of false psychotherapeutic cults but emphasizes the need for true, rational psychotherapy. These cults all assert in a chorus most emphatic that beliefs, though false, may displace morbid ideas and effect cures. Years devoted to the development of a workable, practical psychotherapy have convinced Carroll of the preponderating value of work as a present help and a lasting benefit in the treatment of the nervous. The value of Mitchell's rest cure is unquestioned, but often proves inappropriate or inadequate; but work truly is life. As Hall has said, the human body is made for action. Therapeutically, the proper form of work should be prescribed, well within the strength of the patient and requiring sufficient mental activity to distract attention from the purely physical. Even drudgery has its place. There is a wholesome discipline in work. The mental relaxation and rejuvenation which follow substitution of reasonable physical employment for high-pressure mental strain cannot be gainsaid. Wholesome benefits come to the mind from the physical exaltation following the normal use of our muscles. The greatest influence of work as a therapeutic measure rests in the mastering of self which comes with work, and when self-mastery replaces indulgence and doubt of one's strength is replaced by faith, when morbid self-centeredness, that miserable dwarf of

the soul, gives way to an externalizing self, then the passion for material comfort will lose its devitalizing power, and a mastery will ensue superior to petty discomforts of temperature and weather, the habits of our neighbors' children and the din of traffic, a mastery superior to the miserable hyperesthesias and dysthesias so incident to nervousness. Such will ever be the mission of work when divorced from damaging moods.

PROF. KRAEPELIN'S EXPLANATION OF HOW A SMALL QUANTITY BECOMES A LARGE ONE.—The weakness of will produced by the poison continues for a very long time in a drunkard; at any rate, the danger of occasional relapses is extraordinarily great. Indulgence in alcohol itself in particular, even in very small quantities, immediately weakens the power of resisting temptation. We all know that nobody sits down to get drunk, but that under the influence of the first few glasses self-control is more and more completely lost. —*Kraepelin's Lectures on Clinical Psychiatry.*

NEW TECHNIQUE OF SPINAL ANAESTHESIA.—Dr. Poenaru, surgeon to the Central Hospital of Craiova, calls attention, in the *Deutsche Medizinische Wochenschrift*, to some improvements he has made in the technique of spinal anaesthesia by means of stovaine. One of the disadvantages of the drug is that it decomposes, and gives a milky precipitate when in contact with an alkaline medium, and these results happen in the spinal canal as soon as the drug comes into contact with the alkaline cerebro-spinal fluid. Since the alkalinity of this fluid varies in different individuals, it is impossible to know before injection how much of the drug will be precipitated and how much will enter the circulation. It is this fact which explains the variability of the results obtained from spinal injections of stovaine. The author, after experimenting with phosphoric acid, has now rejected this, and substitutes lactic acid, which he adds to the stovaine solution to inhibit precipitation. He finds that an eighth of a minim of a strong solution of lactic acid is sufficient to effect this. In addition to the acid, the author adds a

little adrenalin to the stovaine solution, which he finds prolongs the duration of the anæsthesia and diminishes the chances of intoxication. He employs the following technique when administering the spinal injection. To fifteen minims of a one in a thousand solution of adrenalin in a glass vessel is added 1 minim of strong lactic acid. In another glass vessel there is placed sufficient stovaine solution to amount to three-quarters of a grain of the drug. Just prior to performing spinal puncture two drops of the first solution are added to the stovaine solution, and the whole thoroughly mixed by shaking. Puncture is then performed, and 30 minims of spinal fluid withdrawn and added to the stovaine mixture, which is then well shaken again. Of this new mixture, 30 minims are drawn up into the syringe and injected into the spinal theca. The author finds that this technique ensures complete, constant, and safe anæsthesia for a period of two hours.—*The Hospital*.

CONCERNING DUCTLESS GLAND THERAPY.—The progress of the past decade, during which time one gland after another has yielded its secret to the industry of the experimental biologists, is noteworthy. We can no longer agree with Magendie, who in 1841 remarked "I have nothing to say of the suprarenal capsules; what function has the thyroid gland?—nobody knows it!" Thyroid activity has been the subject of the most exhaustive study during this period. Kocher's designation of the complex of symptoms following complete removal of the gland as *cachexia strumipriva* found its analogue the same year in Semon's suggestion that the symptoms of myxedema were similar and due to loss of thyroid secretion. The theory of Moebius, that the Basedow syndrome is an expression of hyperthyroidism, is now universally accepted, while the brilliant results of administering thyroid in cretinism are parts of the romance of medicine.

At first the absolute anatomic and physiologic independence of the thyroid and parathyroid was not recognized. The tetany that sometimes followed the removal of the thyroid *in toto* was supposed to be due to the loss of thyroid

function, until the suggestion was made that its cause lay in the simultaneous removal of the parathyroids. Then the striking subsidence of symptoms following the administration of parathyroid glands in post-operative tetany was conclusive that these glands were the causative agent. Probably the most interesting phenomenon was the demonstration by Voegtlin and MacCallum of disturbed calcium metabolism in experimental tetany following parathyroidectomy, and the cure of such tetany by the administration of calcium salts. A few clinical reports have also been made showing the same effect of calcium.—*Interstate Medical Journal Editorial*.

PITUITARY GLAND THERAPEUTICS.—The extract of the infundibular portion of the pituitary gland used in my experiments was evolved by the Department of Experimental Medicine of Parke, Davis & Co. The application of a drug so profoundly affecting function and tissue waste is necessarily wide. Its effect upon the cardiovascular system makes the ideal treatment in the various disturbances of arteriosclerosis. When digitalis is contraindicated because of its overstimulation of the heart muscle and because full doses dilate the blood-vessels, pituitary substance is not only indicated but has proved useful in atheromatous conditions of the vessels and in weakened heart. It seems as free from ill effects as spartein, yet many times more active. By its effect upon involuntary muscle movement atheroma is controlled and bradycardia is brought nearer to the normal. The angina of arteriosclerosis has quickly yielded in two cases coming under my own observation. In the albuminuria of dropsy of the later stages of arteriosclerosis, pituitary substance acts most efficiently. Both dropsy and albumin have disappeared in some cases. In aortic stenosis as well as aortic regurgitation, in which digitalis is condemned, this drug is markedly beneficial. Just as digitalis strengthens and slows the heart action in mitral regurgitation, so does pituitary substance.

In a case of endocarditis the albumin and dropsy disappeared after six months' use of the drug, and the force of

the heart-beat was increased. Three convulsions occurred in this patient, epileptiform in type; cyanosis and signs of approaching death were so marked that only the continued effect of the pituitary substance prevented heart failure. Two cases of rheumatic endocarditis and pericarditis were brought to a successful termination by its use. In a case of sclerosis of the liver, complicated by endocarditis and secondary anemia, rapid improvement came from its administration; the heart was greatly strengthened, the pulse dropped from one hundred and twenty to ninety beats, and the anemia was considerably lessened. Pituitary substance appears to meet the expectations in *psychoses*; it may be useful in certain forms of epilepsy. And it promises to become a specific in giantism and acromegaly. In the treatment of exophthalmic goitre it controls tachycardia; in telangiectasis it has proved useful. In pituitary substance it is believed organotherapy has given to us a drug that will counteract the pessimism of therapeutic nihilism as have pepsin, pancreatin, and the suprarenal substance.—*Parke, Davis & Co., Therapeutic Notes.*

NEUROPHYSIOLOGY.

THE FUNCTIONS OF THE THYMUS GLAND.—In the *Berliner klinische Wochenschrift* for May 2, 1910, Hart and Nordmann report a long series of painstaking and elaborate researches into this subject, which have led them to the opinion that the thymus gland may be an important, and possibly an essential, organ in the life history of the animals.

By developing a careful technique they have succeeded in completely extirpating the gland from a large number of young puppies, in each case an entire litter being used, part for the extirpation operation, and part for controls. The most striking result obtained was that, though the puppies stood the operation well and recovered quickly from its immediate effects, in no instance did an animal live longer than a year afterwards. The effect of the removal of the thymus gland upon the general condition of the animal appeared to be to inhibit its power of making proper use of

its food. Though kept in the best of hygienic conditions, and given plenty of good food to satisfy the inordinately voracious appetite which they developed, the dogs did not develop as did their normal brothers; they were distinctly below the average weight and their muscles were flabby and soft; they tired easily, and showed no inclination to romp and play as does the healthy puppy. Signs of rickets which have been reported by other observers were not present, the bones being quite normal and the backwardness being confined to the soft parts.

Some distinct correlation between the action of the thymus and the other ductless glands was suggested by the experiments. That with the generative organs was shown by loss of all sexual instincts in the dogs, by sterility, and by atrophic changes in the testes and ovaries. The antagonistic relation of the thymus to the adrenals was indicated by a hyperemia of the latter and a constant arterial hypertension in the animals from which the thymus had been removed. The combined action of the lowered nutritional power of the muscles and the increased blood pressure was marked in the effect upon the heart, while the increased resistance caused marked cardiac dilatation, the lowered nutrition prevented compensatory hypertrophy, and in practically every case the dogs died from paralysis of the over-distended flabby heart. The power of the animals to combat infection also seemed to be greatly reduced. This was especially pronounced in the lowered resistance to pyogenic infections of the skin, successive crops of boils appearing, showing very sluggish powers of healing, and recurring quickly in nearly all of the thymectomized dogs, while the normal control animals, occupying the same kennels, were not attacked.

These experiments, when coupled to our anatomical knowledge of the large size of the thymus gland in infancy, and its gradual decrease and almost disappearance at or near puberty, suggest that the organ has an important function in regulating not only the bodily but the sexual growth of the young animal. The uniformity of the symptoms produced by total extirpation of the thymus, and their complete absence whenever intentionally or by accident, even a small

fragment of the gland remained, rules out the possibility of the results being due to the general manipulation of the operation, and makes it appear probable that the internal secretion of the thymus gland is as vital to the animal organism as that of the thyroid and the other ductless glands.—*Abridged Editorial N. Y. Med. Rec.*

PSYCHO-SURGICAL THERAPY.

WE ARE GRATIFIED to note the following psycho-therapeutic awakening in the ranks of rational surgery as portrayed editorially in the *American Journal of Surgery* under the editorial caption of "Surgical Sociology."

Here is our hand, Drs. Brickner, MacDonald and Warbasse, and our heart's approval with it.

Neurasthenia following operation is not uncommon. Successful removal of organic disease often leaves a sufferer from functional disease.

Psychic hygiene is as necessary before operation as is physical hygiene. The normal man is a worker, not an idler. The undernourished and overworked ward patient suffers keenly mental irritation from lack of harmony with his restraining hospital environment—especially with his enforced idleness. Lying in bed staring at blatant wall papers or monotonous shiny ceilings, hearing groans, shrieks, perchance noting projecting "in memoriams" on the walls, is scarcely conducive to rapid psychic convalescence. Without some mental occupation there is a more or less complete maladjustment of patient and environment. The will of the patient is subordinated to institutional will. Regime, discipline thwart inclination and desire. After a few days the will is overcome and the patient becomes passive. The fatigue of monotony ensues and the will, because of inertia, with difficulty reassumes its burden while the physical body is in a reduced state. Add to this a speedy return from the hospital to poor homes, poor food, poor care and the making of a profound neurasthenic is often well under way.

Convalescent care is not to be summed up in physical care or in sending the body to the solarium; it involves putting the patient's mind at rest and offering restful occupation. Anxiety concerning home conditions is gradually being attacked through social service departments. While in the hospital, building up physically, the patient's outlook on life may be altered by giving him something to do.

The long suffering sweated tailor with a fractured leg may profitably spend his hours at basketry or punched brass work or even whittling. The laundress recovering from an operation may be cheered by clay modeling, embroidery, or pasting pictures. The pale youngster with slowly draining empyema may have his days brightened and his spirits lightened with a few spools, beads, or feathers and his own ingenuity.

Occupational work has been used in institutions for the insane and in sanatoria for the neurasthenic for its therapeutic value. Its preventive value is just gaining recognition and in the surgical wards of many hospitals deft fingers will soon be busied originating or copying work that will give the mental strength and cheerfulness of mind that hasten convalescence and avert an impending neurosis.

PSYCHIATRY.

PROF. WESLEY MILLS ON PSYCHOLOGY IN THE MEDICAL CURRICULUM.—The profession is, I am inclined to think, perhaps almost unconsciously to itself, entering on a new epoch—one in which the psychological manifestations in the patient will receive possibly as much attention as the physical, and in some cases more. We are beginning to pass from a condition when as a profession the psychological has been either ignored or treated in the most empirical way. Yet the day has never been when the really great physician ignored the mind. He has been, consciously or unconsciously, given to minister not only to the mind diseased, but to the mind in

the diseased subject. We are beginning, however, to recognize that this is not enough, but that psychological science must be applied with all the skill possible in dealing with every patient, because the body is greatly influenced by the mind, and because all sense either of pain or well-being is finally a matter of the mind.—*Montreal Medical Journal*.

MEDICO-LEGAL PSYCHIATRY.

THE MEDICAL EXPERT.—The Assembly, in an effort to check the abuse of expert medical testimony in murder trials, has passed a law providing for the appointment of official experts, and for their payment out of the public treasury at rates to be determined by the courts. These experts will be at the disposal not only of the prosecuting attorney but also of the person accused of murder, and at no cost to him. The object of the law, in brief, is to wipe out the advantage which rich criminals now enjoy in the courts, by reason of their ability to summon hosts of pathological perjurers to their aid. It is distinctly provided, however, that at the discretion of the trial judge, defendants may also call in experts not on the official lists, and so it is apparent that the value of the new law will depend, in the end, upon the good sense of the bench.

The medical expert, despite his interminable hypothetical questions and his eagerness to oblige his employer, seems to be here to stay. We have become aware, in other words, that in many cases the criminal is not responsible for his acts; that his crime is proof, not of deliberate devilishness, but of actual disease. It is important, then, that such cases be differentiated from those showing intent and responsibility, and the only way to do it seems to be by seeking the opinion of men specially fitted to inquire into diseased mental states. That such men are sometimes charlatans is beside the point. The thing to do is to weed out the charlatans—the prime object of the New York law. To dismiss all medi-

cal testimony as futile and absurd, on the ground that chicanery sometimes creeps into it, would be to go back to the dark ages, when hysterical women were burned as witches and imbecile children were hanged for theft.—*Medical Legal Journal, Editorial.*

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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

THE CARNEGIE FOUNDATION work and appropriation for the universities' medical college annexes will be hailed with pleasure by enlightened advance desiring men of medicine. But why confine the work to the university annexed medical colleges only? And why seek to put all independent medical colleges, good, bad and indifferent, altogether in the background and out of business? Why speak of them all as mere commercial enterprises when so many of them were founded and fostered by most worthy self-sacrificing efforts of the best men of the profession, when the general public nor the millionaire philanthropist took no interest in them

and the people would have had no facilities for medical learning, but for doctors who taught without pay, gave their money without hope of return and built up the schools and dedicated them perpetually to medical education?

A comparatively small number were stock companies, as they have been called, but even as such they represent, in many instances, the highest professional ambition, self-abnegation and philanthropic action. Many of the recent medical annexes to the endowed universities were built up in this way, in fact, nearly all of them, if not quite all. Most of the faculties of the annexed medical schools so originated. Then why not endow some of the well-intentioned, good work accomplishing, independent medical colleges? Why not help the so-called crippled schools and make them stronger, with a foundation endowment?

This is better than condemning them to death because the big university schools are to have more money. Give the little independents a few crumbs and let them become feeders for the greater. Some of the independent medical schools we might name, rightly endowed, would make better doctors than some of the universities' annexes we might mention, because they have a better medical esprit du corps and take the medical side of laboratory work only, giving extra time to the strictly medical essentials.

MEDICINE AS A PREPARATION FOR OTHER CAREERS is the caption of an excellent editorial in the last January number of the *Interstate Medical Journal*, which is not out of date and will not be for some time to come. It can be read by all doctors, philanthropists, public servants and humanitarians with profit.

Colleges are now and then unjustly criticized because great men so frequently arise from the uneducated mass, though it should have been known that the very few who get a university training are not possessed of all the brains in the world. In like manner, the medical schools come in for some attacks because they did not happen to have trained Pasteur and others who have added so much to the world's knowledge of medicine. In other words, we must expect

that non-medical schools contain misplaced students who are destined to be of great value to us. It does not behoove us to reject the discoveries of extra-academical workers, nor should the geographers look askance at the work of such medical travelers as Livingston. In fact, there is a something connected with a good general medical education which peculiarly fits a man for every kind of work which can be classified with anthropology—the humanities,—even exploration and sociology. Statesmanship is merely a branch of anthropology after all, and it is no wonder that so many eminent statesmen are trained physicians.

In other words, medicine is the best possible preparation for serving society. The time is already here when men of means must take up public service as a duty, instead of frittering away their lives on “society,” “sport” and frivolous things. The poor man can hardly find time to earn his own salt, let alone the duty of helping others. Why not then advise the rich to study medicine, not to practice it and take bread out of the mouths of professionals, but to fit them to careers in statecraft wherein their medical knowledge will be invaluable in devising laws increasing the efficiency and longevity of the workers? Congress should be at least one-eighth physicians, but it will never be such as long as medicine is looked upon as a means for poor men to make a living. Let the college doors be opened to embryo statesmen of wealth, who can afford to spend time working for humanity. Medicine is sure to become a necessary foundation for public service in many of its larger branches. Populations are now so dense that a knowledge of sanitation is essential for all law-makers, and nothing will suffice except the election or appointment of sanitarians to positions of authority. So let the medical schools take heed of their duty to society, in addition to their past attitude of duty to the individual sick. Let them turn out statesmen skilled in prevention, in lieu of experts in cure. We are an essential part of civilized society and we must train the servants. * * *

“THE REAL PHYSICIAN.”—*The Censor* of June 9th, 1910, discussing “Our Noble Science of Medicine” and scoring

medical politicians in the A. M. A., pays the following just tribute to the true physician:

The real physician—how easy it is to select him from other men and for the discerning to find him even in a body of men who wear the same titular prefix! One such does not have to have a record of the real physician to recognize him. You feel rather than know that he is one who has responded to the real demands of the "call." It is felt in the air of sophisticated benevolence about him, no less than in the kindness, toleration and charity of his bearing. It is seen in the modesty and humility that come only from wisdom. In his manner is a high and fine patience with the weaknesses and faults of frail humanity. As much suffering refines and ennobles the individual if it does not harden him, so the physician through contact with much suffering is refined and exalted if he be of that kind from which real physicians are made.

In my opinion the calling of the physician is about the noblest to which men may answer. Its real meaning is self-sacrifice and service to humanity—a service the absorption in which, in course of time, leads to almost complete forgetfulness of self. Not among professional pulpit exponents of his doctrines is the man to be found who approximates the ideal of the Great Physician, but in the medical profession. What other profession in this age is striving to abolish itself in the interest of humanity? That is what the medical profession—or its leading element—is doing. It is striving with all its might to find ways of disease prevention, to educate the people, and to develop sanitation toward the point where the doctor will no longer be needed. The real doctors have conceived the noble idea that it is their highest duty to discover means to keep the people from getting sick rather than to doctor them afterward, and if this attitude does not indicate a splendid unselfishness, what can you ask?

The practice of medicine is extraordinary in the profound and transforming effect it has on human nature, provided the instance in human nature is capable of response. It is really a wonderful thing to have achieved a true physicianhood. While it affects all who adopt it, the developing effect the

practice of medicine has on the right man is truly wonderful. It seldom comes save through long experience, much contact with pain, sorrow and death, and intimate knowledge of the faults, follies and weaknesses of humanity. When such development comes it is to be seen in the serenity of the physician, in his benevolence and charity. In the true physician is a great tenderness, a never failing spirit of patience and forgiveness. The wide tolerance and sophisticated understanding, appreciation of humanity's weakness, and the love of human kind are seen in every speech and act of the genuine doctor. Its tendency is to make men unselfish as does no other calling, the ministry standing at the top in this exclusion. In the power of sympathy it imparts, the true doctor becomes the brother to all creatures that live and breathe and suffer, and because of this fine, tender sympathy there are doctors who come nearer approximating the Christ ideal than any other men who live, and some of these do not even make a pretense of being religious. In their subtle understanding of humanity's failings, in that sympathy which does not need to be spoken but is felt, the physician has become the confessor of the people. That people carry their troubles to the doctor, that they load him with secrets as to their faults and follies they would yield to no one else, is proof that they look to him for sympathy and help and is the finest evidence possible as to the worth and nobility of his character.

Unfortunately all who essay it cannot respond to the exalted call of medicine. There are some doctors who acquire the wisdom and skill that are the first requisites of the calling, but who fail to meet the high moral demands of the profession. They are brilliant and develop great skill, but contact with much suffering makes them callous to pain. They fail to achieve the higher, or moral elements of the profession. The majority of the men who get medical degrees from colleges never become physicians at all. They are either partially developed by their experience or do not respond to their profession's demands at all. They neither cultivate books, try to perfect themselves in the technical details of their calling or respond to humanity's need for sympathy

and understanding. There are few indeed who retrograde or do not advance some, for such an ennobling profession as medicine is sure to benefit to some extent nearly all who follow it, but it is nevertheless true that the demands of the true physician being so high and his creation being the development of the years, such are comparatively few in numbers, but what there are are the noblest types of man and truest benefactors of their race.

SUICIDE BY CRUCIFIXION.—Among the many results charged rather credulously to Halley's comet is a suicide by crucifixion. While brooding over possible ill effects of the comet's visit, a prospector of San Bernardino, California, became insane and crucified himself. He was found when he had nailed his feet and one hand to a rude cross he had erected near a gold claim. Although seemingly suffering intense agony, he pleaded with his rescuers to let him remain in his spiked imprisonment. Since the comet became visible he has been much alarmed. When he learned that the earth was scheduled to pass through the tail of Halley's comet he believed that the end of the world was at hand. While the comet may have influenced the suicide as to time, it is much more probable that the chief determining factor was an insane egotism like that of Matthias Lorat, of whom J. G. Kiernan (*Medical Standard*, Vol. XII. 1892) gives the following account: "The absence of pain and shock among the insane enables them to attempt suicide in ways impracticable to the sane. One lunatic dried his bread. He then sawed his chest open with it and stuck splinters into his heart. He recovered from these injuries. In four other cases from forty-five to one hundred and four wounds were inflicted in attempts at suicide. One man stabbed himself four times, penetrating the heart once. He broke his skull with a hatchet and finally attempted suicide by drowning, but was resuscitated to die of his wounds.

Another attempt at suicide was that of a paranoiac determined to crucify himself for the world's sins. He deliberately set about the manufacture of a cross and all the adjuncts necessary for crucifixion. Perceiving it would be difficult to

nail himself firmly to the cross, he made a net which he fastened over it, securing it at the bottom of the upright beam, a little below the bracket he had placed for his feet, and at the ends of the two arms. The whole apparatus was tied by two ropes, one from the net and the other from the place where the beams intersected each other. These ropes, fastened to the bar above the window, were just long enough to permit the cross to lie horizontally on the floor of the room. These preparations finished, he put on his crown of thorns, some of which entered his forehead. Stripping himself naked, he girded his loins with a white handkerchief. Then he introduced himself into the net, and, seating himself on the cross, drove a nail into his right palm by striking its head on the floor until the point appeared on the other side. He placed his feet on the bracket, and, with a mallet, drove a nail through them both, entering a hole he had previously made to receive it, and thus fastening them to the wood. He then tied himself to the cross by a piece of cord around his waist after which he wounded himself with his shoemaker's knife in the left side, but failed to injure any important organ. He had made several scratches on his breast to determine the place of least resistance. This knife represented the spear of the crucifixion. This was done in his room. In order to show himself to the people he placed the foot of the cross upon the window sill, which was very low, and by pressing his fingers against the floor he gradually drew himself forward until the foot of the cross, overbalancing the head, the whole machine tilted out of the window and hung by the two ropes fastened to the beam. He then nailed his right hand to the arm of the cross, but could not succeed in fixing the left, although the nail by which it was to be fixed was driven through until half of it came out on the other side. After hanging thus an hour he was noticed, detached from the cross and put to bed. He recovered from the wounds, but remained morose, taciturn and solitary." The impelling belief of the Californian was probably identical.

ETIOLOGY OF DEMENTIA PRECOX.—Since Kraepelin created this syndrome and believed that its cause was an

autogenous toxine, a school has arisen which believes that the symptoms of catatonia, hebephrenia and paranoid dementia are not only bent and colored by the individual's psychic make up and experiences, but that the whole disease is psychogenous. They hold this belief in spite of the failure of every effort to arrest even the psychological symptoms by psychotherapy.

They reject Kraepelin's hypothesis of a toxic origin largely on account of complete failure to demonstrate any toxine after a most careful and prolonged research, of which the exhaustive effort of Folin is the best known.

To the writer this seems a totally untenable position; for Folin's investigation had to do with the analysis of the physiological contents of the urine which toxins might in no way affect.

When we consider our almost complete inability to chemically detect so gross a perturbation as that which causes the symptoms of hyper or hypothyroidism, acromegaly or Addison's disease, and that so toxic a substance as digitalin cannot be detected in the blood as a chemical substance, it is utterly unjustifiable to negate the possibility, at least, that the dementia precox syndrome is a result of toxic factors.

It would therefore be very unwise to abandon the investigation of the metabolic disturbances in this disease; while at the same time carrying on the study of the psychological mechanism which plays so large a part in its symptomatology.

To illustrate, intoxication with cocaine or alcohol may be studied. In each of these the study of the psychoses induced affords valuable data to psychopathology; but it does not exclude either the fact that the whole syndrome is toxigenous nor are we asked to forego our researches into the chemico-pathological mechanism of the intoxicated body. What applies to a known intoxicant may very well be utilized in the study of a disease which many psychiatrists regard as belonging even psychologically to the type of toxic psychoses; for in dementia precox one finds in less obvious shape the characters which may be shortly summed up as onirical (dream-like) delirium. For instance, automatism, hallu-

inations, impulsive acts, apparently incongruous relations of thought, inappropriate emotionalism, suspiciousness, incongruous laughter and tears. All appear on the surface in both admittedly toxic psychoses and in dementia precox.

MR. JEROME ON MEDICAL EXPERT TESTIMONY.—During his remarks commendatory of Dr. Carlos F. MacDonald at a dinner given in MacDonald's honor, the New York attorney uttered the following true sentences:

There is no subject on which more poll parrot nonsense is uttered than the subject of medical expert testimony.

Out of the 15,000 lawyers in New York there are not more than fifty who are qualified by experience to speak with authority on this question. No man has had more experience with experts than myself during the eight years I was district attorney. And during that time I recall only one man whose testimony was radically dishonest. There were many who disagreed with me honestly. (Applause.) In only one case was there any miscarriage of justice. And in every case the judgment of the experts retained by the State was justified by subsequent clinical history. There was only one case which attracted great public attention, and there was only one physician who was touched by the great scandals arising therefrom. And I am positive in stating that the scandals arose through judicial incompetency rather than from any corrupt medical testimony.

I have never heard of greater nonsense than the proposal that there should be a trial of the guilt or innocence of the accused first and then that the question of insanity should be considered by the court under proper safeguards. I know of no case where insanity was interposed as a defense where it was not conceded that the killing would have been murder in the first degree if the accused had been sane. There is no more need of the abolition of expert medical testimony because it is said that some medical experts are willing to prostitute their knowledge—to lie on the stand—than to abolish lawyers because some attorneys coach witnesses in a way that amounts to subornation of perjury. I have caused the disbarment of twenty lawyers for unprofessional

practices, and not in one case where I have proceeded against an attorney has he escaped disbarment or suspension.

Mr. Jerome then went on to outline his plan for a medical supervisory tribunal. He said there were hundreds of medical men, in the knowledge of those present, who through "drunkenness, the use of narcotics, or charlatanism, were a menace to the community," and that there is at present no adequate method of dealing with these cases. He believed that the supposed scandals connected with expert testimony would be abolished by the creation of a tribunal, he proposed, in which, however, we do not concur.

TUBERCULIN IN THE DIAGNOSIS OF TUBERCULOSIS IN THE INSANE. By James V. May, M. D., Assistant Physician, Binghamton State Hospital, Binghamton, N. Y., Reprint from "State Hospitals Bulletin."

This is a most valuable paper and we are gratified that it emanates from a hospital for the insane where this sort of research work is so important and fruitful of results, both as to findings and prophylaxis. We hope the immediate future will see this institution exempt from cases of tuberculosis originating in them, as we hope to see all state eleemosynary establishments exempt from the disease, as an originating source.

The creating of exclusive asepticized wards into which, after initial tests, tuberculotics might be placed on admission, would begin the eradication of this even in this important direction.

We suggest creosoted wood finishings and floors and other anti-tubercular sanitary measures for these institutions, and in fact all hospitals, alms houses, penitentiaries, etc.

The following are the conclusions:

1. Old tuberculin is of little value in the ophthalmic test when used in less than a 5 per cent solution.
2. In the von Pirquet method, only undiluted tuberculin should be used.
3. The subcutaneous method compares much more favorably with the others when a positive reaction is obtained by 2 mg. or less.

4. The most valuable tests are the 5 per cent ophthalmic, the von Pirquet, the Moro and the 1 per cent purified tuberculin ophthalmic test.

5. Positive reactions from three or more of these tests, excluding the subcutaneous tuberculin, are sufficient for a positive diagnosis of tuberculosis, irrespective of physical signs.

6. The subcutaneous tuberculin test, as used at present, is practically valueless when used alone.

7. The opsonic index is usually low in advanced tuberculosis and possibly in the chronic insane with a long hospital residence.

8. A diagnosis of tuberculosis can not be based upon the opsonic index alone.

9. A diagnosis of tuberculosis can not be based upon the results of any one tuberculin test when considered alone.

10. Well-advanced cases may not react to any of the tests.

11. Tuberculin tests, especially the von Pirquet and the Moro reaction, may indicate healed tubercular lesions.

12. The ophthalmic test gives positive results in many advanced cases.

THE LAW'S DELAY.—President Taft, talking to the business men of St. Louis last May, said: "The courts should be reformed so that a poor man stand a chance of getting justice against a man with a long purse." "That he has little such chance now under the court practice in vogue," said the *St. Louis Star*, "is beyond dispute."

"No person without the patience of Job and a purse full enough to stand several years of litigation has much chance to survive the delays and costs of court procedure. Deliberate campaigns of delay and piling up expense are planned and carried out through the looseness and complaisance of court rules and those who apply them. It is not at all difficult to find lawyers and judges to talk about it as President Taft talked, but not so easy to find any of them taking practical steps to bring reform about."

But we must have justice and without expense to the poor, especially in proceedings for recompense for damages to character, life or health, ere we can make honest claim to fair, non-tyrannical government.

The law's delay and injustice must cease before we may call ourselves fair and free.

A SINGULAR IDEA is the following statement of Mr. Curtis, President of the Patriotic, (safe and sane) Independence Day Association, "Professional ethics forbid the physician too pronounced a part in public affairs."

Professional ethics prohibit no such thing. The code enjoins public advice on all sanitary matters as a duty and as a patriotic citizen his public duties are the same as others, though the demands of an exacting profession often interfere, such as exempt him from jury duty, etc. It is the old foggy incompetent who could not make a fair public presentation of himself, who makes this plea.

The public does not call on the profession nor take its advice enough. It is just beginning to wake up in the tuberculosis, yellow fever plague, fly, slum cleaning, and slum tenement crusades.

In another decade no such erroneous notion will prevail among the laity. Doctors have sanitary knowledge and must impart public duties and also perform them. The United States will have a National Department of Health, with a physician in the cabinet of the president, to take the pronounced part he should in public affairs and not a mere bureau either, as President Taft promises.

THE PHYSICIAN AND PSYCHIATRY.—Sylvius, after whom the cerebral fissure is named, declared in 1620 that "the physician who cannot treat the diseases of the mind is no physician." Many practitioners unduly ignore this branch of practice and perhaps some are like the physician in Macbeth, who promptly declared, when he had witnessed Lady Macbeth's plight: "This disease is beyond my practice. . . . More needs she the divine, than the physician. . . . Therein the patient must minister to himself. . . ."

Were I from Dunsinane away and clear, profit again should hardly draw me here."

Every physician should make it his business to inform himself psychiatrically. There is very great need of professional enlightenment in this domain of medicine, particularly in the prophylactic sphere. The clinical phase of well developed aberration next requires understanding, and last, but not least, stands the medico-legal relationships.—*Medical Review of Reviews*.

In line with the above we suggest subscribing for the *Alienist and Neurologist*.

PUBLIC COMMODES.—A citizen calls attention, in the "*Mirror*," to a long felt want of St. Louis, the absence of which should put to shame the shallow suggestions of a million city league, and tells what every travelled man knows, viz.: that every foreign city of half the population of St. Louis and far less pretention, is possessed of and yet St. Louis makes no move to remedy this deficiency, in a metropolitan city. What is the use in talking about getting million people here when the greatest essentials of a city's health, comfort and growth are not provided?

The Alienist and Neurologist has called attention to this matter in past issues but the subject appears to have been out of the range of the average commercialist's vision, who seldom sees beyond the market reports, transportation facilities and street illumination and an electric exhibit at fifty cents per head admission, which ought to have been ten cents, or an aviation meet or convention of some kind.

Unless St. Louis gets more of the appurtenances of a big city it had better ask fewer people to come and see its defects. The suburban city of University City is bigger in its ideals and what it has to show than St. Louis.

* • NAUTCH AND NAUGHTY.—A Joke on the A. M. A. Entertainment Committee at St. Louis.—The A. M. A. committee arranged for a delightful vaudeville entertainment which included a professional India nautch dance by a Hindoo girl of a local troupe, which proved rather too delectable for

some of the visiting medicos who retired when they found that even the fig leaf of Mother Eve was dispensed with. The committee plead ignorance in explanation of the nude nature of the gyrations and were excused.

Though the apology was doubtless truthful and the committee verdant, the explanation came too late for the domestic peace of some of the gentlemen. The modesty of the editor of the *Alienist and Neurologist* was duly respected in this matter for he was not fortunately honored with an invitation, else he might also have innocently been there. Some others were likewise overlooked.

FLORENCE NIGHTINGALE AND PREVENTIVE MEDICINE.—Modern surgery owes no small part of its present greatness to the development of efficient trained nurses. Our congratulations go over the seas to Miss Florence Nightingale, age 90 years, who just fifty years ago founded the Nightingale School for the Training of Nurses in St. Thomas' Hospital, London. To her must be given all honor as the mother of the modern sanitary nurse. To-day we can better appreciate what she expounded 50 years ago: "In surgical wards, one duty of every nurse certainly is *prevention*."—*I. S. W., in Amer. Jour. Surg.*

THE SAVING OF THE CHILD is even more important than the care of the adult in medicine. The potentiality of the future is in the child and makes of pediatrics, as Grotius said of the mind, the noblest branch of medicine, especially if the care of the child's nervous system is duly regarded as it is now too much overlooked through neglect, especially of the hygiene of due relaxation, recreation, food and fresh air.

The healthy "child is father" or mother of the healthy man or woman and sound minded and sound bodied beings are the foundations of the best society and the best states.

TWELFTH ANNUAL CONFERENCE OF THE AMERICAN HOSPITAL ASSOCIATION will be held at Planter's Hotel, St. Louis, Mo., September 20th to 23rd prox.

A good practical program is announced and some good

men of medicine may be seen and heard on the interesting occasion.

PELLAGRA CAUSED BY A GNAT is announced as the most recent scientific discovery concerning this disease, by L. W. Sambon, lecturer at the London School of Tropical Disease, and René Bache has an interesting illustrated contribution on the subject in August *Technical World* magazine.

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

PELLAGRA, A PRECIS. A psycho-pello-neuratropathic agrosis, long known to Southern Europe as an endemic skin and spinal disease and designated in certain parts of the earth as Lombardy leprosy, is claiming much attention now in the Southern American States.

We have before us an interesting paper and precis on the subject of Pellagra by past assistant Surgeon C. H. Lavinder of the United States Marine Hospital Service, giving much of the literature of the subject from many sources.

"The literature of pellagra is extensive, and in the Index-Catalogue of the Surgeon-General's Library, at Washington (Vol. XII, new series), the list of titles will be found to reach the length of some 8 or 9 pages.

Most of the literature is in Italian, French or German. There is but little in English. The writings of Roussel and Lombroso are important. The monographs of Tuczek and Procopiu are more recent and give a good account of the disease. I am especially indebted to these two authors. Sandwith's article, in English, is brief, but gives a good account of the disease in Egypt. Most of the dictionaries, encyclopedias and reference handbooks give good brief articles. In Allbutt's System of Medicine, edition of 1905, will be found a fairly satisfactory account. In most of the larger text-books on the skin will also be found some description of the disease.

1. Triller, B., *La Pellagre*, Paris. Thesis, 1906.
2. Tuczek, F., *Klinische und Anat. Studien uber die Pellagra*, 1. 93. Also Review in *Annales de Dermat. et de Syphil.*, Vol. VI, p. 187, 1895.
3. Sandwith, F. M., *Pellagra in Egypt*. *British Journal Dermat.*, Vol. X. p. 395, 1898.

4. Die Lehre von der Pellagra. C. Lombroso. German translation by Kurella. Review. Br. Journal Dermat., Val. X, p. 419, 1898.
5. Spec. Pathol. und Therapie, Nothnagel, Band XXIV, Hft. II, Abth. II and III.
6. Radcliffe-Crocker, H., Diseases of Skin.
7. Procopiu, G., La Pelagre, Paris, 1903.
8. Manson, Sir P., Tropical Diseases. 4th ed. Abstract.
9. Cecconi, H., Erythèmes pellagriques et E. pellagroides. Paris, Thesis, 1903.
10. Sherwell, S. Tr. Am. Dermat. Assn., 1902, Chicago, 1903, p. 76. A note relative to a case of pellagra. Abstract.
11. Harris, H. F., Ameri. Medicine, IV, 3, 99. Anchylostomiasis in an individual presenting all of the typical symptoms of pellagra.
12. Searcy, G. H., Jour. A. M. Assn., XLIX, 1, 37. Epidemic of acute pellagra.
13. Merrill, T. C., Jour. A. M. Assn. XLIX, 11, 940. A sporadic case diagnosed as pellagra.
14. Board regents and medical staff, State hospital for insane, South Carolina. Report to South Carolina board of health. What are pellagra and pellagrous insanity? Does such a disease exist in South Carolina, and what are its causes? 1907.
15. Kaposi, M., Diseases of the Skin, 1895. Translated from German by Johnston, p. 225."

An illustration is also given of one of Dr. E. J. Wood's cases: A female negro, aged 11, an acute type, with death about four months after the appearance of first symptoms; also had the erythema on the back of the neck, and shortly before death it appeared on the dorsal surfaces of the feet. This case had a younger sister who presented first symptoms at the same time, but she recovered.

A TEXTBOOK OF NERVOUS DISEASES. By William Aldren Turner, M. D., (Edin.) Fellow of the Royal College of Physicians of London, Physician to King's College Hos-

pital and Lecture in Neurology, Physician to Outpatients, National Hospital for the Paralyzed and Epileptic, Queen Square, London, and Thomas Grainger Stewart, M. B., (Edin.) Member of the Royal College of Physicians, London, Assistant Physician to the West London Hospital and to the National Hospital for the Paralyzed and Epileptic, Queen Square, London. Philadelphia, P. Blakiston's Son & Co., 1011 Walnut Street, 1910.

The aim of this book is to provide the practitioner and senior student with a short and practical account of the Diseases of the Nervous System. It is not intended to take the place of the larger and more complete text-books on Nervous Diseases.

In classifying the diseases the author has adopted an arrangement based upon practice and personal experience.

Attention has especially been given to the clinical description of the several disorders—more particularly from the point of view of diagnosis without neglecting etiology, pathology, prognosis and treatment.

To limit the size of the book the author has omitted exophthalmic goitre, myxoedema and acromegaly, which though we regret this omission, the omission has been well compensated for by much other substituted matter of value. The authors are well known and capable as the publishers are—unexcelled in their work.

MEDICAL ELECTRICITY AND RONTGEN RAYS with chapters of Phototherapy and Radium. By Sinclair Tousey, A. M., M. D., consulting surgeon to St. Bartholomew's Clinic, New York City. Among the many good books for medical men put on the market by W. B. Saunders Company, 925 Walnut Street, Philadelphia; London, 9 Henrietta St., Covent Garden, this book is among the best. It is timely, complete in illustration and instruction for every one interested in medical electricity and X ray work and revelation, and who is not? The subject of Fluoroscropy, electrodiagnosis generally and the management of exophthalmic goiter would alone commend and repay the value of this valuable book. The author and publisher have done their

work commendably. 750 practical illustrations (16 in colors) adorn this beautiful and valuable book.

The author acknowledges, with thanks, his indebtedness to Smith Eli Jelliffe, Harry F. White and makes special obligatory mention of Thomson, Houston, Currie, Albert-Weil, and Bordier which further commend the author's excellent work.

PHOTOTHERAPY ON ARTERIAL TENSION. By T. D. Crothers, M. D., Hartford, Conn., Superintendent Walnut Lodge Hospital.

In this brochure the author maintains that the psychical side of these new remedies must be studied, and applied with the same prominence as the physical, in order to secure the best results. The patient's mind must be impressed with the electrical appliances, and the methods of generating the currents, the radiant light bath, the concentrated light from the incandescent or arc light, together with other appliances, and these modalities must be made vivid and intensely material in every case.

This is as thoroughly scientific and essential as the current itself, or any other therapeutic measure which can be used. If the mind is properly impressed, and its co-operation (meaning by this expectation and faith from the suggested thought) sustained by a demonstration, the highest kind of therapeutic power is used.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. A Practical Exposition of the Methods, Other than Drug-Giving, Useful in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College, etc. Volume II, Electrotherapy, by George W. Jacoby, M. D., Consulting Neurologist to the German Hospital, New York City; to the Infirmary for Women and Children, etc. In two books:—Book II, Diagnosis; Therapeutics. Illustrated. Published by P. Blakiston's Son & Co.,

1012 Walnut St., Philadelphia, Pa. Price, eleven volumes, \$22.00 net.

This line of therapeutic resource is not given so much attention perhaps by the profession with certain of their patients, particularly with such as are personally hygienically neglectful of the valuable measures here commended. The names and fame of its several authors and of its able editor, commend the book, as we have said in a previous review.

NERVOUS AND MENTAL DISEASES, A manual for students and practitioners with an appendix on Insomnia by Joseph Darwin Nagel, M. D. and Victor Cox Pedersen, M. D., with illustrations.

Among the handy ready reference pocket manuals this has, in our knowledge, no superior.

The text is clear. In this little book the student, while attending lectures, will find a good companion for the dictionary of medical terms he should always have with him. These two should be constantly with him. Lea Brothers and Company of New York and Philadelphia are the well-known publishers.

GENITO-URINARY DISEASES AND SYPHILIS. By Edward G. Ballenger, M. D., Lecturer on Genito-Urinary Diseases, Syphilis and Urinology, Atlanta School of Medicine. Genito-Urinary Surgeon to Presbyterian Hospital, Atlanta, Georgia, etc. is an instructive, well illustrated volume put before the medical profession by E. W. Allen & Co., of Atlanta, publishers.

The 86 illustrations and the text cover 276 pages and convey as much practical enlightenment as any other book of this size to the student of this important subject.

SOME FACTS THE GENERAL PRACTITIONER SHOULD KNOW REGARDING THE TREATMENT AND CARE OF THE INSANE. By William Mabon, M. D., New York, Superintendent and Medical Director, Manhattan State Hospital, Ward's Island. Reprinted from *Med. Rec.*

These practical contributions from practical sources of

alienistic experience should be sought after and read by all general practitioners and most specialists whom we know might benefit much by the reading.

THE PROPAGANDA FOR REFORM in Proprietary Medicines Sixth edition, reprinted from the *Journal of the American Medical Association*, containing Council Reports, Laboratory Contributions, Miscellaneous Nostrums and Miscellany. This is a book of value to any reputable physician whose life policy and principle are honesty of purpose, service to mankind and familiarity with the therapeutic implements of his art and science and their counterfeits. It will show the honest doctor how cheaply certain American and foreign physicians sell themselves as promoters of remedial delay, health destruction and death. This book reveals enough of proprietary and patent medicine indifference to consequences through postponed diagnosis and proper timely medication, to give us pause for thought and remedy. It should bring about an honest medicine companion to the pure food law now on the national statutes.

Objections might be raised to some caustic editorial opinion and comment, but many of the facts are startling and should be more generally known to the profession and public, especially to the medical and secular press. The showing up of Manola and its methods, the business side of mechanico-therapy, Kutnow's powder, the kidney and consumption cures, the pink pills for pale people, Marienbad and other bad tablets will interest the reader looking for the light, on how good money is made by bad devices and health impaired among the "E. Z. marks" of this fake medicine ridden people.

THE EVOLUTION OF ANTISEPTIC SURGERY is one of the best of the little lecture memoranda put out by Burroughs, Wellcome & Co. for the edification of the members of the American Medical Association of St. Louis. It is a valuable historical resume of an important subject in medicine and surgery and portrays the work this popular firm of caterers to the profession and shows with illustrations and descriptions of their specialties what they are doing.

NURSING FOR THE NEUROLOGIST—THE PSYCHIC FACTOR AND WHAT TO AVOID—THE PRINCIPLES THAT GUIDE. By Tom A. Williams, M. B., C. M., (Edin.), Washington, D. C.

FIFTY-SIXTH ANNUAL REPORT OF THE TRUSTEES OF THE TAUNTON STATE HOSPITAL for year 1909.

HUNTINGTON'S CHOREA. By F. W. Langdon, M. D., Cincinnati.

"The Value of Staff Conferences in State Hospitals," is undoubted and the author, Elbert M. Somers, M. D., First Asst. Physician, St. Lawrence State Hospital, Ogdensburg, N. Y., is certainly right in his insistence thereon. The entire staff of every well ordered hospital should have the *Alienist and Neurologist* also always handy for reference for it is the most practical psychiatric journal in the world. Its entire life of thirty-one years has been zealously and assiduously devoted to the welfare of the insane and the enlightenment of physicians and others who minister to the mentally maimed both without and within the hospitals.

The Grinnell Review, devoted to the interests of Grinnell College and its graduates, comes monthly during the college year to our sanctum, laden with matter of interest to many of the best of two generations of Iowa and neighboring citizens.

We knew this good school when it was young and taught our "young ideas how to shoot." We owe it much for whatever of successful marksmanship we may have achieved in the battle of life. Here is a school worthy of the moneyed philanthropists who wish to help further-on the worthy. If Mr. Carnegie will ask us we will take pleasure in telling him why.

The following excellent reprints by Smith Ely Jelliffe, M. D., Ph. D., of New York, are received:

Dementia Præcox-Manic Depressive Insanity (A Clinical lecture)—The Thalamic Syndrome—Notes on the History of Psychiatry: A Contribution to the History of Hunting-

ton's Chorea—a Preliminary Report—General Paresis—The Alcoholic Psychoses, Chronic Alcoholic Delirium (Korsakoff's Psychosis)—Psychiaters and Psychiatry of the Augustan Era.

Le Droit De Infant Abandonne et Le Systeme Hongrois de Protection de L'Enfance. Ouvrage Publie Sous les Auspices Du Ministere Royal De L'Interieur De Hongrie par Zoltan de Bonyak et Cie L. Edelsheim-Gyulai. Avec une Preface de M. le Comte Jules Andrassy. Budapest, Imprimerie de la Societe Anonyme Athenaeum, 1909.

American Association for Study and Prevention of Infant Mortality is a leaflet issued by the American Association for Study and Prevention of Infant Mortality, in response to requests for a plan adaptable to the work of nurses' associations, social workers, or other associations which deal with either the mother or baby.

Report of the Committee of the American Gynecological Society on the Present Status of Obstetrical Education in Europe and America and on Recommendations for the Improvement of Obstetrical Teaching in America. B. C. Hirst, M. D., Chairman.

Sterilization of Degenerates. By Edwin A. Down, M. D., President Connecticut State Board of Charities, Hartford, Conn., 1910.

Thereapeutic Drainage in one hundred and eighty-five cases of Uterine Obstruction, presenting a fine fenestrated rubber uterine drain. By A. Ernest Gallant, M. D., New York.

Dannemore State Hospital for Insane Convicts. Tenth Annual Report of the Medical Superintendent, 1909. Prison Department of the State of New York.

Thirty-fourth Annual Report of the Managers of the New Jersey State Hospital at Morris Plains for the year ending October 31st, 1909.

Eighteenth Annual Commencement of the Training School for Attendants at the State Hospital for the Insane was held at Danville, Pa., June 23, 1910.

The Office of Coroner, Its Past, Present and the Advisability of its Abolishment in the Commonwealth of Missouri. By R. B. H. Gradwohl, M. D., St. Louis.

The Role of Cerebral Lesions in Infancy and Childhood in the Causation of Epilepsy by Dr. M. L. Perry, Parsons, Kans.

The Diagnostic Value and Therapeutic Effects of Bismuth Paste in Chronic Suppuration. By Emil G. Beek, M. D., Chicago.

Restraint Instead of Treatment, A Relic of Medieval Times in our Present Hospitals for the Insane. By L. Vernon Briggs, M. D., Boston.

Department of Commerce and Labor, Bureau of the Census, Mortality Statistics, 1908. Ninth Annual Report. Gov't. Printing Office.

Addresses Delivered at the Meeting of the St. Louis Society for Social and Moral Prophylaxis held December, 1909. Good addresses and timely and a very important organization for the popular welfare. We wish it prosperity.

Virginia Health Bulletin, State Department of Health, Richmond, Va.

Historical Memoranda Concerning the Philadelphia Hospital for the Insane. By Charles K. Mills, M. D.

Standardization of High Potential Electric Currents. By Edward C. Titus, M. D., New York.

The Static Brush Discharge. By Frederic De Kraft, M. D., New York.

Die Melancholiefrage. By Prof. Dr. A. Hoche, Leipzig.

Surgical Treatment of Tuberculosis, Pleurisy, Lung Abscess and Empyema. By Emil G. Beek, M. D., Chicago.

Conditions Simulating Tubal Pregnancy. By Dr. H. S. Crossen, St. Louis.

Eighteenth Annual Report of the Trustees of the Foxboro State Hospital, Mass., 1910.

The Delinquent Child in England. The report of Walter Lindley, M. D., LL. D., Special Commissioner.

Medical Expert Testimony. By Thomas P. Prout, M. D., Summit, N. J.

Nasal and Pharyngeal Obstructions in Infants and Children. By Myron Metzenbaum, M. D., Cleveland.

First Biennial Report of the Ohio Hospital for Epileptics at Galliopolis.

The Professional Anesthetist. By Myron Metzenbaum, M. D., Cleveland.

First Biennial Report of the Massillon, O. State Hospital.

PUBLISHER'S DEPARTMENT.

A NURSE'S CRIMINAL MISTAKE in a Denver hospital, giving oxalic acid instead of Epsom salts, should put her out of business or the pharmacist or other person who placed the violent poison where it might be handled in mistake of Epsom salts.

Doctors' licenses are revoked and lawyers disbarred for less crimes than this. Why not punish negligent death causing nurses?

A similar mistake occurred in St. Louis some time ago.

THE BROMIDES.—“In the treatment of spasmodic diseases of childhood, Peacock's Bromides will be found to replace advantageously other forms of bromide medication, because it rarely, if ever, is rejected by the stomach. In addition to epilepsy, they may be resorted to with confidence in convulsions, cholera, infantile colic, nervous cough (whooping cough), and in certain forms of enuresis attended with irritation about the neck of the bladder.”

CLEAN MONEY.—The introduction in the United States Senate of a bill requiring the cleansing of money is in the interest of hygiene and cleanliness.

A BOSTON PHARMACY BASE BALL TEAM, looking about for an appropriate name, says the *Boston Transcript*, could not decide between Qui-Nine and Strych-Nine and so the team is anonymous.

THE SECOND SUMMER.—Experience has shown that during the second or “teething summer” weakened stomachs are strengthened, faulty metabolism is corrected, fatigued

Feeding of Infants in Diarrhoea

To be given cold or very warm, (never lukewarm) in small amounts, frequently repeated, for a day or more, or until stools lessen in number and improve in character.

Then milk may be added in small quantities until full diet is reached.

We cannot emphasize too strongly the benefit of such a diet in all forms of Summer diarrhoea.

Additional formulas may be found in our book, "Formulas for Infant Feeding," which will be sent free upon request.

MELLIN'S FOOD

2 level tablespoonfuls

WATER

8 fluidounces

Analysis of above mixture:


Fat	trace
Proteids (cereal) . . . .	.56
Carbohydrates (no starch)	4.33
Salts23
Water	94.88
	100.00

Calories per fluidounce=6.2

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heart and circulation is supported, and many a tired, worn-out nervous system is restored to its proper tone by the systemic and intelligent use of small doses, 20-30 drops, according to age, of Gray's Glycerine Tonic Comp.

THE NEURONS.

Innumerable links in a system vast
Of bright and shining chains,
Whose form and shape were molded and cast 
By God with infinite pains.

Here thought wings her flight from link to link,
As the lightning through the cloud;
And consciousness begins to think,
And utter its thoughts aloud.

A link is a cell of wondrous shape,
A body of marvellous strength,
Where energies stored, again may partake,
In the drama of life at length.

A dendrite issuing from each pole,
With its fingers multiple,
Gathers the news at his neighbor's toll,
And as quick its messages tell.

With an axone passing from the cell,
Whose collaterals ramify,
And an arborization terminal,
Conveys impulses by.

And this bright link in life's firm chain,
Is a Neuron wonderful;
Here pleasure romps, here writhes our pain—
'Tis our cup of blessings full.

Divinity alone could build
A temple all so rare;
No architect, however skilled,
Could hang such lights with care.



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THE method of treatment is new and very successful. The withdrawal of the drug is not attended by any suffering, and the cure is complete in a few weeks' time. The treatment is varied according to the requirements of each individual case, and the restoration to normal condition is hastened by the use of electricity, massage, electric light baths, hot and cold tub and shower baths, vibratory massage, and a liberal, well-cooked, digestible diet. A

modern, carefully conducted home sanitarium, with spacious surroundings, and attractive drives and walks. Electro- and Hydro-therapeutic advantages are unexcelled. Trained nurses, hot water heat, electric lights. Special rates to physicians. For reprints from Medical Journals and full details of treatment, address

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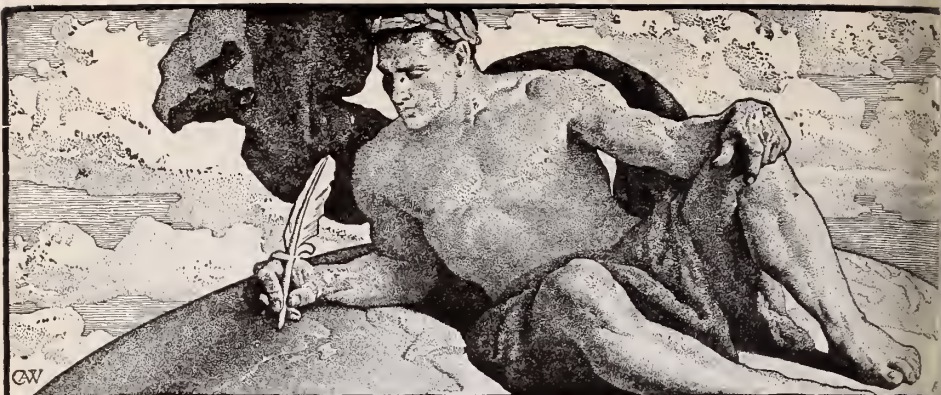
Amazing wonder stands in awe,
 In the presence of life within;
 And thought is stunned by the light and law,
 Of its Builder and Sovereign.

Our Neurons form this life's great seat,
 Or they govern the life so well,
 Possessing powers so ample and meet,
 'Tis worthy there it should dwell.
 —Dr. J. A. De M. Thayer, in *Southern California
 Practitioner*.

IMPROVEMENTS AT NEURONHURST.—The Drs. Mary A. and Urbana Spink, in charge of the Dr. W. B. Fletcher Sanatorium for mental and nervous diseases, are adding a new engine house and garage to the building equipment. The sanatorium with its baths, opportunities for massage and rest treatment, is more and more used for a week or two weeks' rest and medical treatment by Indianapolis people.

The rooms are always full and the institution is accomplishing in a large and helpful way the intention of its founders, Drs. W. B. Fletcher and Mary A. Spink. It is one of the most useful and necessary of our city institutions.—*Indianapolis Medical Journal*.

CARPENTERS, bricklayers, printers—in fact, every artisan—can go anywhere in these United States and be permitted to follow his trade. The followers of that most illiberal profession, medicine, after passing an examination at their medical school and before their State boards, must perforce, ere being permitted to earn a livelihood in a distant commonwealth, go through another test before an unfriendly State board. It would seem the part of wisdom of the American Medical Association to pass a resolution at its forthcoming meeting in favor of a federal license bureau, or a federal board analogous to the Interstate Commerce Commission. A minimum standard of requirement could be adopted by such a board, so that a physician admitted to practice in one State



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CLINICAL EXPERIENCE IS ALWAYS A DEPENDABLE GUIDE.—Countless physicians the country over have proven to their entire satisfaction that Gray's Glycerine Tonic Comp. fills an indispensable place in the treatment of all diseases in which lessened vitality is a prominent feature. It represents one of the notable advances in modern pharmacy, and many a practitioner has learned to rely upon it as his most valuable aid in increasing functional activity. Gray's Glycerine Tonic Comp. exerts an especially beneficial influence on the gastric and intestinal glands, thus stimulating the appetite, improving digestion and promoting assimilation. In all conditions of mental and physical exhaustion accompanied by malnutrition its effects are speedily manifested by an increase in functional vigor and a general improvement in the health of the whole body. Physicians who are not using Gray's Glycerine Tonic Comp. in their cases of general debility are urged to do so and note what really remarkable results they can obtain.

MR. DOOLEY ON DIAGNOSIS.—“By that time I'm scared to death, an' I say a few prayers, whin he fixes a hose to me chest an' begins listenin'.” “Anythin' goin' on inside?” says I. “'Tis ye'er heart,” says he. “Glory be!” says I. “What's th' matther with that ol' ingen?” says I. “I cud tell ye,” he says, “but I'll have to call in Dock Vinthricle, th' specyalist,” he says, “I cughtn't be lookin' at ye'er heart at all,” he says—“I niver larned below th' chin, an' I'd be fired be th' Union if they knew I was wurrukin' on th' heart,” he says. So he sinds f'r Dock Vinthricle, an' th' dock climbs me chest an' listens, an' thin he says: “They'se somethin' th' matther with his lungs too,” he says. At times they're full iv air, an' again,” he says, “they ain't,” he says. “Sind f'r Bellows,” he says. Bellows comes and pounds me as though I was a roof he was shinglin' an' sinds f'r Dock Laporratemy. Th' dock sticks his finger into me side. “What's that f'r?” says I. “That's McBurney's point,” he says. “I

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References—Dr. Henry M. Hurd, Dr. Wm. Osler, Johns Hopkins Hospital, Baltimore, Md. Dr. Thomas A. Ashby, Dr. Francis T. Miles and Dr. Geo. Preston, Baltimore, Md. Dr. George H. Rohe, Sykesville, Md. Dr. Charles H. Hughes, St. Louis.

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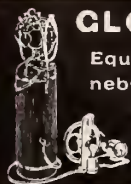
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Meyer Brothers Druggist, July, 1910.

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AT THE COMING MEETING OF THE PUBLIC HEALTH ASSOCIATION, at Milwaukee, September 5th to 9th, in addition to other topics to be discussed, are: The Purification of Public Water Supplies, Modern Practice in Garbage Disposal, Modern Sterilizing Methods for Public Water Supplies and Sewage, The Prevention of Mental Defects and Mental Disease, The Relation of Unnecessary Noises to Health, etc.



THE ALIENIST AND NEUROLOGIST.

VOL. XXXI. ST. LOUIS, NOVEMBER, 1910. No. 4.

NOTES ON A CASE OF EXOPHTHALMIC OXY- CEPHALY.*

BY G. HELY-HUTCHINSON ALMOND, M. B., M. A., Oxon.

A MALE born on October 22nd, 1908, mother 34 and of eight normal children all of whom are now alive and well. No syphilis in father or mother. The former at the time of oxycephalic's birth was suffering from a necrosis and sinus in the lower jaw, now healed. The mother has had no female disease.

Four months before the birth of the patient the mother received a severe fright on seeing a burning child, and to this fact she attributed the deformity. Attended by a midwife. Though the labor only lasted seven hours, the head was rather slow in being born. The baby's weight was estimated at nine pounds. The skin was natural in texture and color. It was brought up to me on account of the shape of its head.

The forehead had a characteristic dome-shaped appearance rising abruptly from the orbital ridges. The anterior and posterior fontanelles were open. There were large temporal bulgings on each side, and the antero-lateral fontanelles were widely patent. Proptosis was marked and there was some extropion. When five weeks old the occipito-mental circumference of the head was seventeen inches, and the occipito-frontal fifteen, by tape measure over bulgings.

The lateral aspects of the forehead now very much bossed. The frontal suture runs up between them as a shallow

*Selected and abridged from Bristol Medico-Chirurgical Journal of June, 1910, and the term of Exophthalmic added to caption.

depression. The anterior fontanelle is just open. The posterior fontanelle is closed, but close to it the left lambdoid suture is widely open and through it proceeds an encephalocele about one and one-half inches in diameter. The temporal bulging on the right side is now closed over the bone, but on the left side there is considerable diamond shaped opening of the fontanelle. Both postero-lateral fontanelles only just admit the pulp of the finger. The following measurements were taken at various times:

	Nov., 1908	May, 1909	May, 1910
Occipito-frontal.	15	17½	19
Occipito-mental.	17	18	24½†
Level of eyes.		19	22
Fron. ext. aud. meatus of one side to other side. .		15½	16

Eye sockets very shallow. A considerable portion of the roof of the orbital cavity, which is much more vertical than normal, can be easily palpitated without displacement of the eyeball. Exophthalmos has been marked since birth. Dislocation of either eyeball occurs occasionally when the child cries. During the first year no squint was observed, but for the last six or seven months the child has been fixing with his right eye, whilst the axis of the left eye points a little downward and outward and this tendency is increasing. Vision good, no nystagmus. The eyelids at times cover the eyes during sleep, but at other times closure is imperfect. Discs natural, bridge of nose depressed. The palate highly arched, upper jaw contracted, the central portion bowed out as a buttress. Two teeth were cut before three months, the remainder before one year. The upper incisors crowd together.

The chest is fairly well developed, heart natural, lungs sound. Abdomen natural, limbs thin and flabby. Child unable to walk, can stand supported.

In December, 1909, the baby had measles, followed by a sharp attack of bronchitis. In March, 1910, he awoke one afternoon from sleep, began to sweat, vomited and fol-

†Partly accounted for by enlargement of cephalocele.

lowed this up by tonic and clonic convulsions. The fit was followed by another bout of bronchitis.

The photograph shows the patient taken with his eldest sister (aged 15). Comparative measurements of their heads.



Patient	O. M.	$24\frac{1}{2}$	O. F.	19
Sister	O. M.	$25\frac{1}{2}$	O. F.	$21\frac{1}{4}$

Carpenter (1) shows that for congenital heart cases the theory of maternal impressions does not hold water, adducing as proof that the foetal heart is, in miniature, perfectly formed

seven weeks after conception unless, of course, as is quite possible, the cause of the condition had been at work before the end of the fifth month, his remarks as regards the present case can only be of indirect value.

The malformation has been ascribed to intra-uterine meningitis, which is supposed to cause early union of the sutures, but there is no evidence in the history of the mother to prove this.

There is, however, in this case evidence of the early union of some, at least, of the sutures, and the well marked frontal groove in the present instance bears this out. The early appearance of the teeth, the author considers, brings up the possibility of some hyperacidity of the osteoplastic tissues.

The early union of the sutures, especially of the coronal and saggital, leads in some cases to a microcephalic oxycephaly, such as was described in one of Mr. Power's cases (2) or depicted in one of Dr. Morley Fletcher's cases (3).

In other cases, as in my own, some of the fontanelles and sutures—the points of weakest resistance—have apparently yielded to the increased pressure put upon them, and this has lead to the formation of encephaloceles, and at the same time has possibly indirectly paved the way for an accompanying hydrocephaly.

The malformation of the orbit is generally supposed to be due to synostoses affecting the base of the skull.

Mr. Beaumont has seen the child with me several times, and already alluded to it in the Transactions of the Ophthalmological Society (4). To him I am indebted for several valuable suggestions.

-
1. Proc. Roy. Soc. Med., Child. Sect. 1909, ii, 277.
 2. Tr. Ophth. Soc., Lond., 1894, xiv, 212.
 3. Proc. Roy. Soc. Med., Clin. Sect. 1903, ii, 115.
 4. Tr. Ophth. Soc. Lond., 1910, xxx, 47.

OPPENHEIM ON MUSIC AND NERVOUSNESS.

WITH COMMENTS BY C. H. HUGHES.

DR. F. ROBBINS presents from Dr. Oppenheim (*Der Musicsalon*, No. 11-12, 1909; Ref., in *Neurolog. Centralblatt*, June 1, 1910), the following on which we briefly comment. "Musical individuals are distinguished, as a rule, by their great emotional instability. On the other hand, a musical disposition is at the same time a disposition to nervousness, and it is for this reason that neurasthenics are so common among musicians. The musician has not been rendered nervous by the music, but he owes his nervousness to the same disposition from which his musical sense and capacity take their origin. Musicians become nervous because they are predisposed to nervousness. They are frequently one-sided and possessed of but this one gift. The possession of a single talent in its turn is closely related to the neuropathic and psychopathic diathesis.

"Music leads to neurasthenia, provided there is a predisposition present, through psychic processes, such as emotional excitement in making music or listening to it, and mental exertion when composing. The occupation-neuroses of musicians are caused by physical processes.

"With special reference to the therapeutic action of music on the nervous system, the author points out that there is an over-irritability of the nervous system, with which the enjoyment of music certainly does not agree. However, there are also other types of nervousness in which the active or passive occupation with music, limited to brief periods of time, may have an entirely beneficial effect."

The psychic neurone overtax of too prolonged practice and habitual cerebral excitation to exhaustion, in both student and teacher, and in some, the additional factor of alcoholic stimulation followed by exhaustion, has brought many musically trained patients to us, some of whom were

not naturally markedly nervous before beginning the study and practice of music. One of them now perfectly recovered in neurone tone and stability was so automatic and impulsive in mind that he could not sit still at his first visit to our office or refrain from going over the rhythmical cadences and finger gestures of a new tune going through his mind which he subsequently published, along with other productions of musical and operatic merit.

This party has made a pre-eminent mark and is at the head of his profession though not now engaged in personally conducted teaching. He now displays no noticeable cerebro-psychic instability or musical excitability.

Another patient, a young lady not markedly nervous before taking up musical voice culture and studying in Europe, was brought home almost a psychasthenic wreck, her subconscious and automatic life markedly ascendent, the name of her Florentine teacher Musarini (we will call him, this is not his name,) being obtrusively uppermost in her mind and almost constantly repeated. She recovered and is now well but her musical career is ended and merged into home interest and in domestic occupation.

As to the effect of music on the mind and brain, much depends upon the character of music, the duration of the musical impression, the tax or over tax of study, the psychic solicitude of the student, environment, whether encouraging or depressing, nutrition, rest and sleep.

Nostalgia, too, plays a depressing part in the cerebro-psychic exhaustion and brain and mind break of American musical students, especially abroad and in the United States far away from their homes. We have studied no others.

Then there is the inherent neuropathic and psychopathic diathesis which must always be considered in the problem of the care or cure of the aspirant and worker for musical success and pre-eminent acquisition.

The hours of study demanded by some teachers are excessive and the hours given voluntarily to practice by some are far too many.

Some select the wrong instrument. One little lady, in the early twenties, now twenty eight, weighing less than

ninety pounds and not five feet in stature, with hands as small in proportion as her body, selected a church organist's career or was forced into it by home and church influences. She went all to pieces neuropathically four years ago and is not well yet in her psycho-neural centers. The ambitious efforts she made to master the keys deformed her phalanges and wrists because they were too small.

So that while it is true that musicians are, as Oppenheim says, distinguished as a rule by their great emotional instability, it is rather the result of their over zealous, over strenuous, too long continued work and the excessive vibratory influence to which their psychic centers through their auditory mechanisms are subjected, than a predisposition to neurosis. To labor without ceasing to be a pre-eminently great musical artist is to imperil cerebro psychic neurone stability. To labor successfully there must be a rational physiologically regulated output and intake of nervous energy. The student and the professor alike generally should work under neurological and psychiatric advice.

With vocalists a fatal error is often committed when the vocal power fails in co-ordination, by the consulting of the throat specialist, instead of the neurologist and the general practitioner who would prescribe rest. The musician whose fingers lose their cunning is in the same category as the chorister whose vocal cords cramp, but the latter generally goes to the right source for needed advice and treatment whereas the singer will go wrong if he consults only the throat specialists, thinking the trouble is local throat disease and not damaged innervation power.

A gentleman, then aged thirty-three, now fifty, above the average of stature and physical proportion, of good mental and muscular development, without neuropathic heredity and more than ordinary life expectation, his mother having died at an advanced age of a purely physical affliction, his father now living and vigorous at 88, with all his mental faculties intact, his special senses good, except slight deafness, and of an ancestry longer lived than himself. His grandmother reaching ninety-five and grandfather one hundred and five to the writer's certain knowledge. The gentleman we are

describing is a member of a choral club. Meeting large and exacting business demands, he suddenly failed in his voice and found himself unable to control certain high notes. They would be prolonged, despite all effort of the will to stop at the right length on the scale.

This gentleman entirely recovered after a season of complete vocal rest and general nerve tone recuperation. He had become insomnic and neurasthenic and had tardy indigestion, but was not markedly neurasthenic and not psychasthenic. The cause of his voice failure was his long hours of business service to which he added too long and too continuous vocal practice after business hours and on Sundays. He was also paying assiduous devotion to the lady who soon after or lately before became his wife.

He had been many years married though he is now widowed, since this voice failure.

Music rightly cadenced and judiciously employed "hath more than charms to soothe the savage breast, to calm the tyrant and relieve the oppressed." Less poetically expressed it has power in psychiatry to tone the brain and mind and it can hurt as well as harm the psychoneural centers.

In martial strains it has led men to glorious death in the battle's front and in melancholy cadences it has driven to self-destruction or implanted the impression that life is "not worth living."

Thus music is a power for good or ill as it is used. It may help repair or cause the shattering and breakdown of the human brain. This is clinical observation. But to be convinced of its possibility, one who has never seen its dire effects, as well as good, need but survey and contemplate the wondrously intricate and delicate anatomy, physiology and fine brain relations of the mechanisms of audition, their receptivity, transmissibility and transforming relations, converting sound wave motion into sensory, motor and ideomotor impression and expression.

That spiral harp of more than a thousand strings—the organ of Corti, the cochlea and its canals and nerve, the ossicles and their cephalad and tympanic relations; the labyrinth, vestibule and semicircular canals, the fluids of

these and their modifying influence, the endolymph generally, the little otoliths or ossicles and their relations to the fenestra and their work.

These and the other related wondrous mechanisms of audition—audition which implies receptivity from without and transformation of sound into idea within and projection beyond the brain to other brains and minds. If we follow the eighth nerve from all its auditory mechanism distributions back to its origin in that little nucleus in the floor of the fourth ventricle and its brain and other neural relations there, we do not solve all of the wonderful phenomena of the functions of hearing. We only see relations and results, as we do in the willed motion of a voluntary muscle, and these results of musical impression may be salutary or harmful, according as we adapt external impression to adaptability and capacity of neural and brain neurone endurance and capacity of reception and reaction to psycho-neurone assimilability to receive and evolve external musical vibration into expression without unrecuperable exhaustion. Thus we may see, (the musical professors and instructors with their long hours of practice to the contrary notwithstanding,) that much harm may be done to the brain of the study fatigued, by the too long continued and too oft repeated daily practice at the piano or other musical instrument. The piano may become an instrument of pleasure and uplift or torture and ruin according as the student is required to practice thereon.

The ear and brain will not endure perpetual sound impression without failing in their best functioning, though some music teachers and amateurs, like some of our citizens on the public streets, think there is no limit to sound endurance and to harsh discordant soul rasping notes at that.

Mighty neuropsychic mechanisms, like the eye and the ear, that transform and transmit sound and sight motion into emotion and thought, are worthy of more consideration, as avenues and causes of disease impression and excitation elsewhere in the system, than they receive, even from the physician, in our day of wondrous revelation, though he should give them even more attention than they now

receive. Life and sanity and much of the varied forms and features of neuropathy and psychopathy have their origins in impressions on and through the eye and ear or on eye or ear or peripheral nervous system elsewhere.

We should not with Oppenheim say music leads to neurasthenia provided there is a predisposition, but that it may so lead if practiced in excess like the excess of other tastes and passions or that musical individuals are distinguished as a rule by their great emotional instability. It takes stability as a rule to make one great in anything. Excessive application may bring about final instability in those who accomplish great things in any line of paramountly successful long continued endeavor, except in the inherently exceptionally strong and endurable. It is the over-reaching ambition and the persistent unremitting application and the oft attendant solicitude, embarrassments and worry of the aspiring to be great that bring the break of instability in psychic neurone we call psychasthenia. To become great in any sphere of aspiring endeavor requires wisdom and prudence and patient waiting in work and effort. The preservation of the stability of the psychic neurone through all the strain is the thing for supreme triumph in any ambitious effort. To be weak is to be miserable and to fail in the endeavor. The Mozart's and the Mendelssohn's were strong till after they had astonished the world by their Herculean triumphs.

JUDICIAL "TESTS OF OBSCENITY" APPLIED.

BY THEODORE SCHROEDER,

Attorney for the Free Speech League and Legal Councilor to
the Medico-Legal Society.

NOWHERE is the judicial "intelligence" so utterly devoid of real enlightenment as when dealing with problems of abnormal psychology. Were it not so pathetic we could find great humor in the judicial hysteria over "obscene" literature. Unconscious of the fact that the obscenity is the contribution of the reading mind,¹ our "most learned judges" when trying to objectivize the judicial moral-sentimentalism, by unconstitutional judicial legislation creating tests of obscenity, make standards which are not only very contradictory but also very ludicrous when examined from the view-point of the scientist. It seems as though judges think of themselves as possessed of a capacity for acquiring a knowledge of science by some mysterious occult means, which makes it unnecessary for judges to investigate, before expressing a judicial determination involving scientific problems.

The most frequently used "tests" of obscenity probably are the following: "Where the tendency of the matter is to deprave and corrupt the morals of those whose minds are open to such influences and into whose hands a publication of this sort may fall * * * The statute uses the word "lewd" which means having a tendency to excite lustful thoughts."² I intend to apply the foregoing "tests of obscenity" to a few of the related facts, well known to the psychiatrist, in order that their connection and the crass

1. (Ellis' *Studies in the Psychology of Sex*, v. 6, p. 54. *Varieties of Official Modesty*, *Albany Law Jour.*, Aug., 1908. *Legal Obscenity and Sexual Psychology*, *Alienist and Neurologist*, Aug., 1908. *What is Criminally Obscene*, *Albany Law Jour.*, July, 1906.)

2. (U. S. N. Bennett, Fed. Case, no. 14571, vol. 24, p. 1102.)

judicial ignorance concerning the import of these "tests" may become more generally known.

Krafft-Ebing, in quoting the confession of a masochist, gives this as the language of the afflicted one: "That one man could possess, sell or whip another caused me intense excitement; and in reading 'Uncle Tom's Cabin' (which I read about the beginning of puberty) I had erections. Particularly exciting to me was the thought of a man being hitched up before a wagon in which another man sat with a whip, driving and whipping him."³

Here then is a case, not dependent upon the jurors' mere *a priori* speculation, but of demonstrated fact that, the "tendency" of "Uncle Tom's Cabin" is, according to the judicial ignorance, to "deprave and corrupt the morals of those whose minds are open to such influences" and it has a *demonstrated* "tendency to excite lustful thoughts." Thus, by the generally accepted judicial tests of obscenity, our "most learned" judges condemn "Uncle Tom's Cabin" as being an "obscene" and a "lewd" book, and it is a crime to sell it, or to send it by mail or express, if the "law" (?) is uniformly enforced.

One need but know the facts of sexual fetichism and apply the judicial "test" of obscenity, to an apron, feathers, any item of female attire, such as the shoe, furs, handkerchiefs, gloves, silks, velvets, or even a woman's hand, or hair, or perfumes, and thus demonstrate that in themselves each of these are objects of "public indecency" and "obscenity" because "to those whose minds are open to such influences," to-wit: certain sexual fetichists, each of these have a *demonstrated* "tendency to excite lustful thoughts."

Dr. Havelock Ellis recently wrote this: "The case has lately been reported of a young schoolmaster who always felt tempted to commit a criminal assault by the sight of a boy in knickerbockers; that for him was an 'obscene' sight—must we, therefore, conclude that all boys in knickerbockers shall be forcibly suppressed as 'obscene?' "⁴ Most assuredly!

3. Psychopathia Sexualis, Chaddox translation, p. 105.

4. Free Press Anthology, p. 224.

If the judicial test of obscenity and lewdness is to be applied, it becomes a public indecency, in many states criminal-ly punishable, to permit a boy in knickerbockers to be seen in public, and a picture of such a boy would be an "obscene, indecent, lewd and lascivious" print, within the meaning of the postal law because it has a *demonstrated* "tendency to deprave and corrupt the morals of those whose minds are open to such influences," because in such persons the picture of a boy in knickerbockers has a *demonstrated* "tendency to excite lustful thoughts."

The literature of sadism also furnishes illustrations of the crass ignorance involved in our judicial "tests of obscenity." "There is a case of a boy who experienced sexual feeling by viewing the picture of a battle scene,"⁵ hence, such pictures are "obscene and indecent, lewd and lascivious," and therefore, criminal if sent by mail. Again he writes: "A surgeon confessed to the writer, that while reading in a surgical work a description of the puncture of a festered wound, he found himself, to his astonishment, in a state of sexual excitement" and, therefore, according to the judicial "test of obscenity," a book on surgery is non-mailable because "obscene and indecent," etc., it being no w a *demonstrated* fact that such books have "a tendency to excite lustful thoughts," and therefore, by the official "logic," a tendency "to deprave and corrupt the morals of those whose minds are open to such influences and into whose hands a publication of this sort may fall," to-wit: certain sadists.

Maj. R. W. Shufeldt, a distinguished scientist and a retired army-surgeon, while denouncing the absurdity of suppressing the literature of human topographical anatomy, said: "My studies have brought me much evidence in this matter. It is only the sadist who quivers with sexual excitement as he or she stands and views the whips and a few other implements in the windows of a harness store and not the normal being; it is only the hopeless sexual pervert who is driven to libidinous gratification after viewing the piston copulating with the cylinder on the side of a locomotive,

5. Arthur MacDonald in *Medico Legal Journal* for March, 1907.

and not the healthy minded engineer in the cab; and one case came to my knowledge of a man who was so delicately balanced sexually that he could not view in the window of a fish store a lot of hard shelled clams, that the association of the name, and the outline of the posterior aspect of the bivalve did not suggest to his mind the external sexual parts of woman and greatly excited him as a consequence. All this constitutes no valid reason, however, for our prohibiting a whip display in a tradesman's window; do away with the locomotive, or suppress the public sale of clams."⁶

Here then we have it demonstrated according to the most generally accepted judicial criteria of "obscenity" that "Uncle Tom's Cabin,"—a book on surgery, a hard-shelled clam, a horse-whip, a ladies shoe, glove, handkerchief, and in fact everything on earth is legally "obscene, indecent, lewd, or lascivious," because to *some* minds lewdness had been or might be suggested by it.

There was a time when the Federal Supreme Court still subordinated the will of its judges to constitutional law. Then it was said: "It would certainly be dangerous if the legislature could set a net large enough to catch all possible offenders, and leave it to the courts to step inside and say who could be rightfully detained and who shall be set at large."⁷ But that time is past, in many fields of jurisprudence we are the helpless victims of the arbitrary will of a lawless judiciary. This lawless judiciary in the matter of obscenity has legislated into existence "criteria of guilt," so contradictory as to be meaningless, so inclusive as to make everyone a criminal, and when applied to all conceivable cases, so fantastic in their result as to make our courts a laughing stock of the alienist. And these courts, which unconstitutionally enact such contradictory and extremely absurd criteria of obscenity, tell us: "These are matters which fall within the range of ordinary intelligence;"⁸ and "everyone who uses the mails * * * must take notice

6. *Pacific Medical Journal*, (March, 1909, p. 152.

7. *U. S. vs. Reese*, 92 U. S. 219-221.

8. *People vs. Muller*, 96, N. Y., 410.

of what in this enlightened age is meant by decency, purity and chastity in social life and what must be deemed 'obscene, lewd and lascivious.' "9 Bah!!!

But, our judges are not solely to blame for being so densely ignorant as not even to suspect the fact. The blame lies farther back with our moralists for revenue who with the stupid sentimentalists have so nearly suppressed all literature not in harmony with the theology of sex, that the average physician is quite as ignorant as our "most learned judges."

Dr. Wm. G. Robison edits several journals for his professional brethren, and makes something of a specialty of venereal subjects. Yet he, who is accounted among the leaders in his profession wrote this: "And so (as in the case of beauty and ugliness it is in regard to obscenity) the thing in itself is not obscene; in the midst of the desert or at the bottom of the sea, it is not obscene. But if it induces some people, *however small a number*, to commit indecent, unhealthy things, then the thing is indecent, and no amount of sophistry can do away with the fact."¹⁰

No! the judges are not the only ones whose minds are "uncorrupted by learning" on sexual psychology, and they are not to be blamed for their ignorance, only for their unwillingness to be enlightened. But what shall we say of the moralists for revenue and the moral quacks in the medical profession?

9. U. S. vs. Rosen, 161, U. S. 42. See also Redd vs. State, 67 So. E. Rep. 711.

10. Altruria, 1907, p. 2. Italics are mine, T. S.

SYLLABUS OF STUDY IN PSYCHIATRY.

Suggested by the British Medico-Psychological Association, for Doctors Who Contemplate Taking Charge of Psychopathic Hospitals.

PRESENTED WITH COMMENTS BY C. H. HUGHES, M. D.,
St. Louis,

Honorary Member of the British Medico-Psychological Association, Teacher and Author of Psychiatry in the Medical College Curriculum, etc., etc.

1.—NEUROPATHOLOGY.

- 1.—METHODS. The preparation of nervous tissue for general and special staining, all methods of embedding and section-cutting, including serial sections, the examination of tract degenerations and the localization of nuclear lesions.
- 2.—The normal anatomy and physiology of the cerebro-spinal and sympathetic systems, knowledge of the course of the tracts in the central nervous system with their connections will be necessary.
- 3.—Neuropathology will include all the inflammatory affections, the system diseases, softenings, hæmorrhages and thromboses (local destructive effects and the reaction of the tissue in the vicinity) all the nerve-cell, glial and hæmatogenous phenomena in the various psychoses, the recognition of museum specimens show local lesions in the cortex and elsewhere, dilatation of the ventricles, granulations in the ependyma, cortical atrophy, porencephaly, etc.

2.—PSYCHOLOGY, NORMAL AND MORBID.

PHYSIOLOGICAL PSYCHOLOGY.

- 1.—Sensation and its attributes, Weber's law, (a) visual sensations, the theory of colour-vision, simultaneous and

successive contrast, after images. (b) Auditory sensation, pitch, timbre, noise. (c) Cutaneous sensations. (d) Gustatory qualities and contrasts. (e) Olfactory qualities, compensations, mixtures and contrasts, the methods of exhaustion. (f) The sense of position and movement.

- 2.—Perception and ideation and their physical bases, space perception, the classical illusions and their explanation, time perception.
- 3.—Conception.
- 4.—Ideational type and the various methods of investigating it.
- 5.—The association of ideas, its law.
- 6.—Recognition, memory and imagination.
- 7.—Judgment and reasoning.
- 8.—Affective tone, pleasure and pain, emotions, passions, moods and temperaments, their physical bases.
- 9.—Action, instinctive, volitional and automatic (habitual), the reaction experiment and its uses.
- 10.—Attention, its nature, laws and varieties.
- 11.—Fatigue, muscular and intellectual, the ergograph, the effect of drugs on fatigue.
- 12.—The sentiments, the æsthetic, moral and intellectual, modes of belief, doubt.
- 13.—The physical concomitants of language.
- 14.—Sleep, dreams and hypnosis.
- 15.—The ego.
- 16.—The synthesis of consciousness.

MORBID PSYCHOLOGY.

- 1.—Disorders of sensation, occurring in association with mental disease.
- 2.—Disorders of perception, the psychology of imperception or agnosia, hallucinations and illusions.
- 3.—Disorders of the train of thought.
- 4.—Illusions of recognition and memory, amnesia and hyperamnesia.
- 5.—Abnormalities of conduct, apraxia and its varieties, disordered instincts.

- 6.—The psychology of inattention and distraction.
- 7.—Disorders of language and their psychology.
- 8.—The origin of delusions.
- 9.—Altered personalities.

3.—CLINICAL PATHOLOGY.

- 1.—SPUTUM. Amount, character, colour, odour, macro- and microscopic constituents, bacteriology, sputum in various diseases.
- 2.—URINE.—Collection and preservation, amount, specific gravity, color, odour, reaction, the nitrogenous bodies and the inorganic acids, and bases, pigments, bile acids, carbohydrates and allied bodies, proteids, hæmaturia, organized and unorganized sediments, concretions, bacteriology, the urine in general diseases and in diseases of the urinary organs.
- 3.—STOMACH contents, vomits, products of digestion, microscopic examination. Intestinal contents, examination of stools, constituents, reaction and colour, fat, mucus, blood, pus, undigested food, and bacteriology.
- 4.—BLOOD. Technique, fresh blood, blood cell counts, blood staining, specific gravity, coagulation, bacteriology, serum diagnosis, opsonins, opsonic index, the blood in various diseases.
- 5.—VARIOUS BODY FLUIDS. Specific gravity and constituents of fluids, cerebro-spinal fluid, bacteriology of cerebro-fnal fluid, Wasserman's reaction, transudates and exudates.

4.—CLINICAL NEUROLOGY.

- 1.—The mode of detection and the clinical significance of neurological phenomena underlying mental disturbances.
- 2.—The position, character, and associations of headache.
- 3.—Epileptic, Jacksonian, cerebellar and hysterical convulsions.
- 4.—Disorders of smell, vision, taste and hearing, paralyses and spasms of the eyes, face, jaws, tongue, palate and larynx. (Candidates may be required to show fami-

liarity with the use of the ophthalmoscope and laryngoscope.)

- 5.—General and local paralyses, rigidities, tremors, and other abnormal movements.
- 6.—Incoordination.
- 7.—General and local anæsthesia, hyperæsthesia and pain.
- 8.—Alteration in the superficial and organic reflexes and the so-called tendon-reflexes.
- 9.—Changes in the reactions of muscles to electrical stimulations.
- 10.—Vaso-motor and trophic disturbances.
- 11.—Abnormal postures and gaits.
- 12.—Aphasia and disturbances of articulation.

Candidates will be required to give evidence of knowledge of the etiology, pathology, symptomatology, course, diagnosis, prognosis and treatment of the various recognized diseases of the nervous system.

5.—PSYCHIATRY.

- 1.—The various forms of mental disease, their etiology, pathology, symptoms, course, diagnosis, prognosis and treatment.
- 2.—Examination of, and reports on, cases.
- 3.—The medical jurisprudence of insanity, certification, responsibility.

The above is the report of T. W. McDowall, Chairman of the Sub-Committee, January, 1910.

The following is a copy of the letter which was approved at the Annual Meeting of the Medico-Psychological Association held at Leeds in July, 1909, and signed by the President, and sent to all the Universities and Medical Schools.

Medico-Psychological Association of Great Britain and
Ireland,

11, Chandos Street,
London, W.

Sir,

August, 1909.

I am instructed by the Council of the Medico-Psychological Association of Great Britain and Ireland, to approach

the Universities and other examining bodies on the subject of post-graduate instruction in Psychiatry.

It has long been felt by those most intimate with the subject that there is in this country no adequate systematic instruction in Psychiatry. The evils of this neglect become year by year more and more manifest. This Association is impressed with the urgent necessity for post-graduate teaching in Psychiatry in Medical Schools and for the granting of a special diploma to candidates after examination, as has already been done with such conspicuous success in Public Health and Tropical Medicine. The position of Psychiatry as a branch of Medicine is unsatisfactory; it is not properly affiliated to other departments of medicine, to their mutual detriment; and under present conditions cannot make full use of those modern methods of research which have resulted in such advances in general medicine.

Young medical men on their appointment as medical officers to Asylums, find themselves face to face with work and problems of which they have had no previous knowledge, and in preparation for which they can obtain no systematic and scientific training or teaching. As is well known, lectures on Psychological Medicine, and pathological laboratories have been established here and there, and, in one or two Universities, Chairs of Experimental Psychology have been founded; but there is no systematic course of instruction and no recognized diploma at the end of such course. It is submitted that the time has now arrived when such a course and diploma should be established in the principal medical schools of this country, and a diploma in the subject should be instituted by the examining bodies. My Association is of the opinion that the institution of a diploma would impose a high standard of acquirement in the officers of asylums, would stimulate the scientific study of insanity, and would have an effect in widening and deepening our knowledge of the subject, comparable with the effect produced in Public Health and Tropical Diseases by the institution of diplomas in these subjects.

In this letter it is unnecessary to enter into details as to the time required for this post-graduate work, and the sub-

jects to be studied; probably each University and examining body will form its own views on these points. I may say, however, that my Association considers that the minimum period should be one year; that provisionally the subjects should be divided into (a) compulsory and (b) optional; that in the former should be included (1) Anatomy, Physiology, and Pathology of the Nervous System; (2) Psychology, Normal and Morbid; (3) Clinical Pathology; (4) Clinical Neurology; (5) Psychiatry, Systematic, Clinical and Medico-legal. The optional subjects suggested are (1) Experimental Psychology; (2) Bio-Chemistry; (3) Bacteriology; (4) Comparative Anatomy and Physiology of the Nervous System; (5) Eugenics. It is suggested that only one optional subject be required of candidates. The Council of my Association respectfully asks that its proposals may receive earnest consideration, so that in the near future it may be possible to place the teaching of Psychiatry on a sound scientific basis, and so bring it into line with other special departments of Medicine in this country.

I am, Sir,

Your obedient servant,
CHAS. MERCIER,

President (1908-9.)

We commend the overlooked subject of psychiatry in all its aspects, but especially clinical, pathological and physiological, to the earnest consideration of the Carnegie and other worthy foundation plans of educational aid, to take the place of the over demanded detail biological and chemical laboratory work assigned to the overworked students of the large universities' medical annexes and independent schools as well, including psychopathic hospitals.

We commend it to the medical colleges of this country and of British North America, whether beneficiaries of the "Foundation" and annexed to the thus favored general scientific and literary universities or those original school children of the first born of the medical profession yet unallied—the independent, unannexed medical colleges and strictly and exclusively medical.

We hope the Council on Medical Education of the A. M. A. and the Congress of American Physicians, the American

Academy of Medicine, the Mississippi Valley Medical, the several Tri-State Medical and the State Medical Associations of America, will consider this. The medical profession through Pinel, Chiarugi, the Tukes and Yorks and our own Benjamin Rush, who struck the chains from the insane and gave them humanely constructed abodes and charitably devised restraint. It should everywhere free these unfortunates psychically, so far as may be practicable, by providing skillful medical treatment, as is now done in some states and places, though not yet in all.

The humane side of modern medicine has been much manifest in regard to the insane in what it has sought in our day and in immediately preceding days and generations. But the duty yet remains towards them to provide in every state, medical men for their treatment, of up to date psychiatric, psychophysiological and correct general therapeutic knowledge. This duty is now on all the schools and it is a higher duty than extremely technical general laboratory detail personally practiced. The doctor's life can not be spent exclusively in any laboratory, though he should be familiar in outline with laboratory methods and know laboratory results for use and enlightenment in his art.

The doctor's field of victory is in disease. His warfare is an applied art for the sanity and the sanitation of the patient, for his rescue in mind and body. These are his trophies of victory. Overcrowded insane hospitals, like the general hospitals for chronic cases, once curable, are more or less a reproach to the medical profession.

We should fight against the, now too often, need of the autopsy, and the now too often requisitioned lunatic asylum and summoned undertaker.

IS GENIUS A NEUROSIS, A SPORT OR A CHILD POTENTIALITY DEVELOPED?*

BY JAMES G. KIERNAN.

Chicago, Ill.

Fellow Chicago Academy of Medicine, Foreign Associate Member French Medico-Psychological Association; Honorary Member Chicago Neurologic Society, Honorary President Section of Nervous and Mental Disease Pan-American Congress 1893, Chairman Section on Nervous and Mental Diseases American Medical Association 1894; Professor Neurology Chicago Post-Graduate School 1903; Professor of Nervous and Mental Diseases Milwaukee Medical College 1894-5; Professor of Nervous and Mental Diseases Illinois Medical College 1905; Professor of Forensic Psychiatry Kent-Chicago College of Law.

KUEHNE[†] BEVERIDGE in a recent interview, in the *Chicago Tribune*, on the success of her new statue in Berlin, claims it represents human bouyancy and exaltation through deep sense of sex. She regards active Algolagnia like that of "Jack the Ripper" as a like expression. This view is so especially common among certain artists, literati and critics that it tends to foster the egocentric spirit whether an expression of precocity or of imperfectly evolved adolescence. It is undeniably true, as Ellice Hopkins[†] remarks, that many girls get into mischief merely because they have in them an element of the black kitten which must frolic and play but has no desire to get into danger. "Do not you think it a little hard," she remarks, "that men should have dug by the side of her foolish dancing feet a bottomless pit and that she cannot have her jump and fun in safety and put on her fine feathers like the silly bird witted thing that she is, without a single false step dashing her over the brink and leaving her with the very womanhood dashed out of her."

*Continued from *Alienist and Neurologist*, August, 1910.

†Cited by Havelock Ellis, "Sex in Society," Page 289.

The difference in type between the girl who consciously has her fun at the expense of others and the one deeply considerate of others, is no more dreamed of by Ellice Hopkins than that evils which Schiller and Goethe pointed out a century and more ago:

No one will a cobbler be
Every one doth himself an author see

must result from fostering the egocentric literary or artistic aspirant seems evident to the sociologic student of history like Macaulay.²

Despite this teaching from history the world is to be inundated with the

Youth foredoomed his father's soul to cross
Who pens a stanza when he should engross

and his calf-like products, Upton Sinclair³ urges a permanent endowment analagous to the Nobel fund. Its purpose would be the encouragement of vital creative literary work by the establishment of scholarships or prizes to be given for a period of two or three years with the possibility of continuance if the author's work should make it seem worth while. He claims that the establishment of such a fund would call attention to the fact that there does not exist in America provision for the maintenance of young men and women who wish to learn the difficult art of creative writing; nor any way by which genius may be recognized and saved from extermination.

"The provisions of such an endowment would have to be drawn with care. They should make clear that what is sought is young work rather than perfect work; work of a forward-looking tendency, by writers whose future is before them; and work of a new and path-breaking nature—not simply conventional and well-bred and academic work. The competition should be open to manuscripts published and unpublished; but only to writers who are dependent upon their own efforts for a living. Also we should exclude books which have had a considerable sale; for there is no need to help successful authors.

2. *Alienist and Neurologist*, 1909.

3. *Independent*, July, 1910.

"The success of the undertaking would, of course, depend upon the selection of the judges. We could not please every one, nor hope for infallibility; we could only do our best: endeavoring to pick three men who (1) have produced vital work themselves, and (2) have shown penetration, sympathy, and balance in their judgments upon the work of others. A certain number of the prizes should be by the award of all three judges; there should be at least one prize for each judge to award on his own individual opinion. In a matter of importance such as this, it would be worth making many mistakes to achieve one success. If we could save one Chatterton or Keats it would be worth all the cost and trouble.

"The awards should be for three classes of work: poetry, fiction, and prose-writing of an inspirational character. There should be in each class one prize of \$1,000 for three years, and two prizes of \$500 for three years. I estimate the other expenses: Salary of manuscript readers, \$3,000; salaries of judges, \$3,000; office expenses, \$1,000—a total of \$25,000 for a three years' experiment."

Sinclair submits in conclusion a few "facts:"

"1. Milton, Shelley, Byron, Browning, Ruskin, Swinburne, Hugo, and Goethe were all men of means.

"2. Wordsworth, Southey, Tennyson, all received incomes or pensions.

"3. Marlowe, Chatterton, Poe, Keats, and recently George Gissing and John Davidson, died miserably.

"4. Men like Johnson, Carlyle, Whitman, and Meredith have left testimony to the neglect and poverty which handicapped them.

"5. Of the few poets we have now,———has a pension, and ——recently went into bankruptcy. ——and ——are disgracefully poor, and ——lives like a hermit in a hut. Sinclair cites a score of other men who are in utter destitution, or who have to cheapen and degrade their work deliberately; for instance, ——-. Men like this do not cry their woes from housetops, and they do not write begging letters. But they would accept an award

which was made under conditions which made it a public honor."⁴

It is the misfortune of what is called the entire Christian world to feed too much upon other people's brains than their own, because it is easier to read than to reflect. Hireling writers like hireling preachers rarely rise above the standard of the wealthy who feed them. Printing is so cheap with us that newspapers and magazines do pretty much all the thinking that is done by our people, and the evidence of this is nowhere more conspicuous than in our representative bodies. If you would repeal our tariff upon imports, and impose its 50-per-cent. duty on the net revenue of newspapers, to proportionately raise their price, you would do more to elevate the standards of our literature, the character of our people, and the purity as well as the wisdom of our legislation than if any part or all of Mr. Rockefeller's incalculable fortune were devoted exclusively to the 'endowment of men and women who had shown signs of great literary talent.'

William James writes an opinion in which he says his brother Henry concurs: "A young man whose talent can not find any recognition from editors or publishers in this day of lively competition seems hardly worth encouraging." He suggests as a substitute a fund to pension "older men victims of their genius, but without earning capacity." William de Morgan is without definite conviction and thinks "the idea not one to be lightly discouraged," but fears "mal-administration of funds." Henry van Dyke is also doubtful, while Edwin Markham heartily applauds and Frederick van Eeden indorses the scheme with reservations. Eden Philpotts, the English novelist, writes:

"I can not seriously believe . . . that the lava-flood of mediocrity and drivel poured out here and in America smothers many treasures, as Vesuvius smothered those of Pompeii; for to obtain a hearing is very much easier than it was thirty years ago—thanks to general improvement in education. Moreover, an original man has a better chance to be heard in your country than in mine, because your magazine litera-

⁴*Literary Digest*, August 13, 1910.

ture is alive and alert and fairly ready to welcome a new thing. It is not entirely under the thumb of religion, or in terror of public opinion, or hat off to the young person's parents. Here, these forces rule, because they represent the money, and an artist who lives by writing can only boil the necessary pot with discomfort. No; your budding genius is in better case than ours; you are going on all right, save for a stupid petticoat prudery in sexual matters; while for us, what we want are certainly not prizes for unrecognized merit in our writers, but an effort toward more merit in the readers. We and they alike wallow in the mean sties that our journals provide. We can not get ourselves to them, because magazine proprietors will not suffer us to do so. We must appear before them in the moth-eaten garments that they know."

Mr. H. G. Wells advises the millionaire to let the scheme alone and satisfy his philanthropic impulses with private benefactions. His view is:

"The insurmountable objection to my mind lies in the nature of selecting juries; they invariably become timid and narrow and seek refuge in practical, academic, and moral tests that invariably exclude the real men of genius. No respectable jury would have touched three of the six men named in Mr. Sinclair's list with a pair of tongs. Consider the way in which the Nobel prizes are being distributed, as rewards for longevity among the securely famous; and consider the life-long exclusions by the French Academy and the London Athenæum Club of some of the most brilliant French and English writers. On the other hand, you may easily raise up against the struggling real men of genius, a class of subsidized rivals who will undersell him with all the prestige the prizes suggested would convey."

Jack London is in opposition, but John Galsworthy, Bliss Carman, Stewart Edward White, and Charles Edward Russell favor the plan. The New York *Evening Post* makes this comment:

"The odd fact persists that in this land of unrivaled opportunity, of periodicals circulating by the million and paying ten cents a word, the need of an artificial fostering of literature

should be so acutely felt; whereas in England, with its appreciably lower standard of living, England where authors do not inhabit rural palaces or own a 'string' of motor-cars, the author feels no such need of help from the outside."

That there are great elements of error in Sinclair's argument, from history is evident. Shakespeare starting penniless and weighted down with an elderly shrewish wife retrieved his father's bankruptcy making a fortune. Marlowe lived in revolt against coeval religious thought and customs, reveled and roistered and naturally died poor.⁵ No, "Nobel fund" could have saved him. Goldsmith made enormous profits from his undeniably good work yet was continually in debt and died poor.⁶

That sensationalism which appeals to conventionally unconventional literary taste of the newspaper "story" variety meets with fostering care of its "creative literary powers" is shown in the case of Viola Larsen. In her search for material she created an imaginary "Margaret Meredith Mischief Club" and under its alleged aegis proceeded, aided by some callow youths, to abduct a young girl. In consequence of paternal and police prejudice against such an ardent search for realism she was arrested. This arrest she thus resents in her magazine article on the "Search for Realism."⁷

But in that club of girls, exceptional girls, there was not one with sufficient courage to bear the brunt of their follies. "The pen is mightier than the sword," was their silent motto, therefore, they hid behind petticoats and were brave. I alone took my medicine, not because like a girl, I did not suffer, but to write of life, I must live it and since my adventures seemed to bring me thorns rather than the roses, I had no alternative unless I turned back and relinquished a purpose greater than my demand for existence.

Finally, when they found they could obtain no information from me, the sergeant informed me, sarcastically, that I had been merely sent to the Annex the last time,

5. Taine's *English Literature*.

6. Foster's *Life of Goldsmith*.

7. *Towle's Magazine*, September, 1909.

this time they would place me in a cell. Miss Black expressed her regret,—Mr. Black offered leniency if I would tell all I knew,—I would *tell* nothing. It was eleven o'clock at night and they sent me in a patrol wagon to a place of degeneracy, where, had there been one spark of vulgarity, of lowness in my heart, it would have leaped into life. This was the place they sent me that I might be taught a lesson, while Miss Black went home to her boudoir and the sergeant to his family. It is not self-pity, I passed that mile-stone earlier in life,—I am simply coldly analyzing what we are pleased to term the humaneness of humanity. I was put in a cell, the door locked,—a board to sleep on.

Miss Black, you will never learn from a life of slumming. You, who go your way regardless of humanity, should have spent that night with me.

They brought in a woman—I say “woman” because our language gives us no other word to define the representatives of my sex. A woman! My brain sickened at the thought, for she was a disgrace to the civilized world, and yet, was she a disgrace? Paris-made gowns, someone must suffer. Therefore, while you sip your champagne, those women—your sisters from the beginning of God's or the devil's world, spend the money they steal or beg for a drop of liquor to warm their chilled bodies and drown their memory. They do not merely need something to bring the flush to their delicately rouged cheeks, they need something with the power to make them forget, to give them oblivion from their seething hell of remorse. We send our missionaries to teach God's wisdom to the savages, while these creatures, modern Magdalenes, are dragged in, besotted, from the gutter.

The creature moaned until it seemed my brain would turn with the pity of it. “Stop that,” I begged, “stop that noise, I cannot bear it!”

And she stopped, to brood, or perhaps not to brood yet, for the effect of the liquor had not passed away, but when she sobered and found herself in that hole, God pity her, certainly the devil wouldn't.

It is strange the difference birth makes. Or shall I say, wealth? If a man has an income, an establishment, he may go to his club, drink until he is a senile, besotted thing, and some leader of society pats him on the back, calls him a good fellow, rings for a cab, and the man goes to his establishment, whilst old maids with cats and tea call him an optimist. But the man without the income? Ah! That is different. He spends the money he should use for the good of his fellow beings, for the support of his family, on a cheap glass of poisoned whiskey, and if he drinks to excess, he is kicked out of the bar-room and lies in the gutter, until an officer, between naps, discovers him, hits him on the head with a club and throws him into a cell as that creature next to me was thrown. I thought of many things that night, as its long hours dragged slowly by. This was life—this that I stood on the out-side of and merely glanced at, and I wanted to delve to its heart. In the book I meant to write I determined to show the world the things it tried not to see, to make it acquainted with the things it did not want to know.

After a while some women came through the prison with tracts. Probably they do good, I do not know. I only know that if I had ever wilfully sinned, the threats contained in that piece of literature would have aroused all my braggadocio and I should almost have defied threats of fire and brimstone.

It has been my belief all through life that threats of purgatory did more toward sending men there than all the free soup houses could save. The woman who came to my cell, gave me the horrors! If God's representatives must bear the look of sour pickles in order to be distinguished from the ordinary sinners, they should speak through a tube from behind a cage. If that woman was a Christian, as she claimed, I doubt if God rejoiced in his handiwork. Her face resembled nothing more closely than dried fruit, shriveled, with the mouth drooping at the corners, and her voice merited a place as chief mourner at funerals. I laughed at the tract she presented, and she in turn grew indignant. She did not tell me of God's mercy nor of his Son's compassion,

she simply minutely described the furnishings of the "Devil's Crematory."

And then some women came through singing "Almost Persuaded." The last verse, with its woeful, uncompromising sorrow rings through my ears now.

"Almost cannot avail,
Almost is but to fail,
Sad, sad that bitter w-a-a-a-i-i-l,
Almost,—but lost——"

and as they sang it, they watched the prisoners as curiously as though they had paid admission to the Zoo.

All day we were besieged by visitors and had questions hurled at us. Several very fashionably dressed young ladies stopped before our cell and the poor woman who was still considerably under the influence of liquor did most of the talking. Just as the most exaggerated fashion-plate of the group gathered up her skirts to depart, she touched the half loaf of bread sticking through the bars, and said:

"Well, I certainly envy you girls your lunch." And she laughed sarcastically. Her words disconcerted me to such a degree that a feeling of rage took command of my better judgment. Had she come on a humane errand with the intention of helping some poor prisoner, I would have applauded her, but to stand here and deliberately poke fun at the unfortunate creatures behind iron bars, was unforgivable. I sprang to my feet, and picking up the bread, held it out to her, and said loudly, for the benefit of her friends:

"Do you indeed? Then by all means try some with us."

It was then the effect of her boarding school education showed itself.

"Thank you." She replied, with a laugh. "I would like to, only my dinner is waiting for me at home, and I do not care to spoil my appetite." However, a wave of color swept over her face as she hurriedly moved away from the cell.

In the evening I was summoned to the office and again interrogated by the sergeant. I told him nothing, and

as my father appeared, I was taken home, to appear for trial on Monday.

When we again appeared before the same Justice, he was angry, very angry, because he could not understand my motive; he did not believe in the existence of the club. Miss Black was there, also her parents. When I entered the court-room, the physician came over to make an examination as to my sanity. He asked me, "Had I a good appetite?" "Did I constantly write?" etc., and after I had answered these questions, he pronounced me sane.

Miss Black appeared delighted to give her phase of the story. She started off dramatically, "It is true I am here to prosecute, but I shall temper my complaint with mercy!" Then she proceeded to condemn me as harshly as possible. She enjoyed it immensely. She read over the letters sent her by the Club, and when she finished her "merciful" complaint, she was dismissed. Her father was very indignant, so I repeat, was the judge. He spoke harshly about the matter, especially after he had been reminded that I had appeared before him in the Buggy case. Several times he washed his hands of the matter, but said something must be done to stop this evil. Probably he thought my example would be copied by dozens of girls, but, from my personal experience, I could have reassured him on that point.

"If this girl is sane as the Doctor claims," he said, "we will find a way to stop her foolishness." He said he himself believed I was entirely responsible for my actions and told me that writing silly letters was an offense against the Peace of the City, then he held me over for the Juvenile Court.

Lawyer B. appeared in the Court-room, as my representative, but I had not talked with him in advance, therefore he simply came over and hurriedly said—"Do not answer any questions! Do not know anything!" and I followed his advice.

Before leaving the Court-room, while I waited for my lawyer to sign my bonds, I was startled at the appearance of a young lady of such unusual brunette beauty, that for the moment I was like one who had been stunned, but recognized her

as the representative of one of the leading Chicago sensational papers whom I had at one time seen in the County Morgue, calmly taking a description of an unknown dead. She introduced herself to mother, but I refused to talk and mother plainly hinted we would prefer being left alone.

"But, Mrs. Larsen," the girl persisted, "My editor insists that I shall obtain an interview. You would not have me fail in my duty."

She talked on various subjects, and finally it occurred to me that since they would write a report anyhow, it would be fun to lead them into the dark as much as possible, so I said one thing, then contradicted it, and did this so frequently, that becoming discouraged, she finally left. As I do not want to give this reporter any unpleasant notoriety, I will simply refer to her as Miss Brown.

Before Lawyer B. left us, he gave me instructions to appear at his office the following Thursday, before my case was called.

I give below an extract from Miss Brown's article as it appeared after my confusing narrative.

A love of adventure; a craving for literary achievement; and a thirst for the unusual, were responsible for the first arrest of Viola Larsen, the seventeen year old girl. Were these same motives at work in the mind of the girl when she wrote letters to Miss Black the young woman whose father has had her arrested on a charge of grievously annoying his daughter? The question is, did Miss Larsen write the letters?

Viola herself says she didn't! In the office at the Warren Ave. station she and her mother sat this morning; Viola with down cast eyes and sensitively quivering lips. Her case had just been heard. But the decision was held until to-morrow morning. Miss Larsen at first seemed disinclined to talk, but gradually her reserve melted and she gave full expression to her feelings and her motives in the matter of the Black case.

"I did not write any of those letters," she declared, quietly, yet firmly, "but I did telephone to Miss Black and

try to see her. I was interested in her as the recipient of those terribly annoying letters. I wanted to help her."

"But how did you know that Miss Black was receiving such letters?"

Miss Larsen laughed—a peculiar little laugh. Was it an expression of helpless embarrassment or a flitting gleam of mirth caused by certain recollections?

"We knew it at the Club."

"Then this mysterious Club is really not a myth?"

This time the mirth in her eyes seemed genuine, without question. "Of course it is not a myth," she replied, "Anna King is one of the members. She wrote letters. I knew it and wanted to explain to Miss Black." Miss Larsen then went on to tell of the Club and the mystery attached to its proceeding. "But why all this mystery?" was asked her.

"Why, it's just a prank," she said, her blue eyes now fully raised and shining with girlish interest. "We girls have lots of fun out of it."

"And do you put some of your experiences on paper?"

"Oh, yes. Often."

"For instance?"

"Well, I wanted to experience the sensation of being hypnotized."

"Yes?"

"So I had one of the club members hypnotize me."

"And did she really influence you?"

"I don't remember. All I recollect is seeing her eyes grow very large as she fixed them intently on mine."

"Then you must have gone under the influence, if you remember nothing else."

"My book contains the experience. "But I would not wish any one to see it until it's quite completed."

"I would not either."

Miss Larsen conversed freely about her ambition to become a noted authoress.

"Do you always find it necessary to experience things in order to write of them?"

"Not always. For instance I can write the most ardent love story, and yet——"

"And yet?"

"I have never been in love? I don't understand love, I simply imagine it."

Miss Larsen insisted to the end of the interview that she had not written the letters to Miss Black. Yet the detectives say that she confessed all to them.

It is a peculiar case and Viola is a peculiar girl! Are the stories she tells all inventions of the imagination? Is the Club a myth—a mere figment of an over active brain?

If so, then Viola Larsen is an interesting study for the psychologist! Certainly no more eccentric combination than her wild desire for fame; her craving for excitement, and the marvelous imagination that creates character and situations at will—endowing them with a vitality that makes them living entities."

And I laughed heartily at my success in confusing her.

"The Searches for Realism," appeared in book form and so appealed to newspaper literary methods that it received a denunciatory literary criticism which ignored its vapid style yet so deprecated its realistic tone as to arouse the curiosity of the "lewdly inclined" otherwise called "social purists." Its publisher would undoubtedly sell volumes from such criticism. Viola fell into the hands of a female justice of the peace in a most saintly alcophobiac university town. This justice believing that marriage was a cure (evidently on the old materialistic sexual theory which Freud has revamped under psychologic guise) of such antics wedded her to a young man. Her book having appeared the hysteric explosion occurred in a new form:

"Faithful in the pursuit of her famous 'Search for the Realistic,' Elsie Viola Larsen, Chicago's own Mary McLane, has continued her investigation into the field of matrimony. But having secured all the information she desired and not finding the life to her liking, this young woman has gathered up her belongings and left her husband after living with him four weeks." Returning home one evening he found the following note:

"Dear Billy: I can stand this life no longer and have left for New York to-night. I awoke to the fact that I made

a sad mistake in marrying you, and I am going away to freedom and peace. The rugs, pictures, dishes, etc., you can have. The rest I have sent to my father, as most of it belongs to him. I did not tell anyone about my intentions, and if you want to be happy put me out of your mind. Billy, I don't want to live with you or anyone else. It is a lesson I will never forget. I will never let a pair of black eyes get on my feelings again. I command you to get a divorce on desertion and get some other woman to live with you and make you happy. Farewell. ELSIE."

P. S. The reason I leave like this is that I cannot bear to see you again. Am going to 520 West One Hundred and Fortieth Street, New York City.

At the top of the first sheet of writing the wife had scrawled another postscript: "The house looks bad because I was in a hurry, had sudden news." The runaway wife did not go to New York however.

The husband seems to have been a fetichist of notoriety and evidences such as are attracted by people in the public view.

The husband interviewed on her flight said:

"If she will only come back to me I will do anything she may ask," declared the sorrowing husband yesterday. "I love that girl and I do not believe I can do without her. I will forget and forgive everything gladly, if she will only come back to me.

"Before I met Elsie I dreamed of her three times. My housekeeper also dreamed of her and told me about her. The next evening, while walking on Jackson boulevard, I met Miss Larsen. She was the girl of my dreams, with whom I had already fallen in love.

"I approached her and she smiled at me. Then I spoke to her. I begged her pardon for doing so, but she said it was as much her fault as mine, as she had smiled at me.

"I was attracted by those great, black eyes of yours," she said. She seemed to take a fancy to my eyes. 'I smiled to think of what I would like to write the man with those hypnotic eyes.'

"Then she explained to me that she was a writer, and told me about her book and her search for the realistic, of which her book is to be the expounder. I saw her often after that, and I came to know her spiritualistic friends, having some mediumistic powers myself.

"I am afraid that some medium has secured control over her. I can't understand why she should want to go away. I was always a good provider, and could help with the housework a good deal, as I used to be a cook.

"When I asked her to marry me she told me that I influenced some power over her that no other man had ever done, but warned me she had been a sort of man hater. However, we were always happy in our marriage."

"Viola's—she likes that name best—philosophy of love is contained in letters written to the woman justice of the peace, who married her after a three days' courtship that began with "love-at-first-sight-in-the-street." The husband's offer to sign a life agreement to let her do as she pleased, receive admiring letters from her "intellectual" friends if she wished, and do everything except wicked things, called forth the letters.

"An intense desire to spread his happiness over a lifetime," is one of the indictments against her husband in the letters. She wants her joys tense and brief. She doesn't want to whisper, "I love you" all her life—at least, not to one man, she says.

Just how thoroughly she analyzed the unsuspecting husband during her few weeks of life with him she tells in one of the letters.

"I played on the strings of his heart as carelessly as an amateur handles a priceless violin," she says, "but to me he represented just so much gray matter that I might manipulate, experiment with."

Here is the first letter written as answer to her husband's overtures for her return, made through the woman lawyer:

"There are two sides to every story, as there are two sides to the cloud. The dull, gray side it presents to us, and the sun lined side it shows to God.

"When you read my account against the story of my husband you will be merciful.

"The trouble with him is an intense desire to spread his happiness over a lifetime. This does not appeal to me.

"As in my childhood days, I did not care for the bread and molasses unless I could lick the syrup off in one quick taste, so now does happiness only appeal to me when it is short and strong—but he wants to pull it out as gum is stretched, and there is no elastic happiness.

"He cries in bitterness because I said 'I love you,' and would not continue speaking it. Yet it made him happy at the time and repetition breaks the charm.

I shall be careful to keep out of his sight until I am free.

"VIOLA LARSEN."

The second letter goes into her love philosophy still deeper. It's a second refusal to do any more for the husband than to pity him.

"I understand Mr. B. is still seeking me. Because of my experience gleaned from bitterness, all the sympathy in my heart goes out to him. Yet I do not want his love, especially I do not want the love which interpreted, means physical desire.

"The truth of this did not strike me until too late; after I had played on the strings of his heart as carelessly as an amateur handles a priceless violin.

"To me he represented just so much gray matter, which we call brain, that I might manipulate, experiment with. It simply was unfortunate that I should have chosen a man who knew so little of my work. A man of letters would be different; the game would then have been well played and the cards not jumbled. It hurts to have a trusting heart build a pedestal for an idol, only to find it is made of clay. It almost typifies Kipling's caustic poem, 'The Vampire.' "

A fool there was and he made his prayer

(Even as you and I)

To a rag and a bone and a hank of hair.

The fool he called her his lady fair

(Even as you and I),

But we called her the woman who did not care.

"If it is true Mr. B. loves me so distractingly, then I pity him from the depths of my soul.

VIOLA LARSEN."

The antics of Viola Larsen while of endogenous hysteric origin in part are based on the brutally inconsiderate newspaper methods of securing scandal stories and experiences independently of whose feelings or rights may be hurt. The fact of the publication of a book of the vapid type shown, shows William James is as poor a judge of booksellers as he is of spiritual mediums. At the same time it demonstrates the validity of Well's remarks as to the dangers of Sinclair's "Nobel Fund" notion.

(TO BE CONTINUED.)

ATYPIC EPILEPTIC ATTACKS.*

BY L. MARCHAND, M. D.,

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GENERALIZED epileptic attacks assume so frequently seeming uniformity that it is quite customary to describe usually the most frequent as typical. Among epileptic attacks are usually mentioned only convulsions, vertigoes or absences. The last two are usually designated by the misleading title "imperfect" attacks. The characteristic of these is their brevity, hence "aborted" or "shortened" attacks would be a preferable title. Passing by epileptic equivalents immediate precursors of attacks and post paroxysmal phenomena there will be dealt with here, only attacks whose peculiarities depend on their length, on the simple aborting or complete absence of certain symptoms or on the intervention of certain convulsive phenomena.¹

The symptoms of an epileptic attack consist essentially in a brief loss of consciousness accompanied with tonic and clonic convulsive phenomena followed by an apoplectiform state; the duration is usually from two to three minutes. The secondary symptoms are the initial cry, pallor, foam or bloody spittle and involuntary fecal and urine ejection. These last are too infrequent for an attack destitute of them to be regarded as atypical.

ATTACKS ATYPIC IN DURATION.

The chief characteristic of vertigoes and epileptic absences is brevity. The symptoms of the major attacks are aborted and the patient regains consciousness in a

*Revue de Psychiatrie, April, 1910. Translated by Jas. G. Kiernan, M. D.

1. Maladies du System Nerveux.

few seconds. Other phases may be atypic only "in the length of the convulsive period proper. Here the clonic period is usually prolonged, sometimes there is prolongation of a post clonic contractural period. In other cases the tonic and clonic periods intermingle and succeed each other (Grasset.)² The following case came under care: An 18 year old girl, epileptic since nine, had infrequent attacks not exceeding three a year. The attacks were characterized by a quarter of an hour's convulsive period followed by a tetanic period lasting some seconds, then a clonic period lasting ten minutes. During this last the muscular movements were at first generalized and very rapid, then diminished in extent and rapidity and then retook their former character without the appearance of a tonic phase. After several alternations the patient became contracted in extension in the legs and flexion in the arms. This lasted, according to the violence of the attack, from five to ten minutes when the stertorous phase began. From their onset these phenomena were always the same in each attack. Long duration may confuse the clinician since it is generally held that the comitial attack is brief while the hysteric is long. Epileptic attacks demonstrably exist where the clonic period is very extended and which last as long as hysteric attacks. These have been designated hysteroid, but their transformation into classic epilepsy leaves no doubt as to their real nature. Comitial attacks of long duration are rather rare. Tissot³ has observed cases of ten minutes duration and Féré cases of more than eight minutes. The stertorous phase is so variable that it can hardly be taken into account in dealing with the length of attacks. It is merely an immediate result of the attack due above all to the general nerve shaking-up and exhaustion. In more than half the cases, says Maisonneuve,⁴ convulsions are neither violent nor generalized. They are far from being very decided. Tissot³ makes the same remark. In Féré's experience, the convulsive period is most frequently rudi-

2. Epilepsie.

3. Les Epilepsies et Les Epileptiques.

4. Recherches sur L'Epilepsie.

mentary. Either convulsive phase may be absent. Grasset remarks that the tonic phase may be absent or be the convulsive phase. When the tonic phase is absent the muscular twitchings are apt to accompany the loss of consciousness. One of my patients fell from his bed uttering the epileptic cry. The clonic twitchings were generalized and the entire body was involved. In Gower's experience absence of the clonic phase is infrequent and these cases may be confounded with grand hysteria. "The attacks with merely a clonic phase are slight localized attacks, commencing in an extremity to which they are often limited." There are attacks, however, in which a clonic phase alone occurs. These hysteroid attacks in which the clonic phase alone occurs accompanied with marked convulsions of the extremities are often taken for grand hysteria when they do not alternate with typic epileptic attacks and the error is often not detected until such attacks occur. For several years a patient of mine was for this reason regarded as an hysteric, but the attacks are now typically epileptic.

When the tonic state alone exists, convulsive movements are not extended and the patient passes into contracture with previous twitchings. This type is generally followed by marked stertor. The asphyxic symptoms are marked at the end of the convulsive phase especially if it last more than two minutes. "As a general rule," remarks Gowers,⁵ "the attack is a tonic spasm of little generalized intensity. The patient falls unconscious, remains rigid for some minutes, then returns to consciousness. Some of the gravest attacks consist only in a tonic spasm. A child's head turned to the right, its arms were extended and radiated, the right went further from the body than the left. The two elbows were flexed and the fingers were flexed in the interosseous position. In a few minutes the spasm ceased, having lasted longer in the hands than elsewhere. Clonic spasm was absent. There were likewise more violent attacks, consisting only in a tonic spasm where the arms were raised above the head. There was foam on the lips and the tongue was bitten. Rarely the patient is in a tetanoid state so that the trunk is curved

5. Epilepsy.

behind, forming an arc of a circle. The jaws are set and the teeth grind. The eyes are convulsed, the jugulars and the respiration is braying." In one case reported by Gowers the patient was in opisthotonos and in another in emprosthotonos; a case of L. Pierce Clark,⁶ the rigidity extended from head to feet and the patient could be lifted in one piece.

Pritchard has designated such cases tetanoid. Atypic cases with inversion of the convulsive phases occur. Here the convulsions are first clonic then tonic. After presenting extended muscular twitchings the patients assume generalized contracture. Gowers has reported cases of this type which in my experience is very rare.

Cases atypic from absence of the convulsive phase were first described by Coelius Aurelianus under the title of apoplectic epilepsy and were later studied by Romberg¹ and Trousseau², who called them apoplectiform attacks.

Delasiauve⁴ reapplied to them the old title of apoplectic epilepsy. Féré called them stertorous attacks. The patient suddenly loses consciousness and falls an inert mass. There are no convulsive movements, stertor seems to constitute the whole attack. They generally alternate with other epileptic phenomena. They often appear in parietic dementia, but occur in idiopathic epilepsy likewise. Féré, who regards these as incomplete attacks of essentially epileptic character, reports the following case: He was making anthropometric measures when the patient suddenly paled, stared and fell as if thunder stricken without movement and without rigidity. The face was congested, respiration stertorous. On opening the clothing he was found to have urinated. He was completely relaxed and responded to no excitation. The eyes were wide open, pupils immobiled and dilated reflexes abolished and pulse compressible. In about five minutes respiration became normal. Pinching caused movement. In place, remarks Gowers, of a tonic

6. Amer. Jour. of Insanity, April, 1899.

1. Mortor, Chronicon.

2. Lehrb. der Nervenkrankheiten.

3. Clinical Medicine.

4. Annales Med. Psych., 1852.

spasm gradually transformed into a clonic, movements more delicate and more rapid occur which increase in place of replacing the tonic spasm. This last continues and the rigid, stretched extremities present a rapid delicate movement resembling tremor which preserves the same rapidity.

However violent, however extended convulsions may be, unless they are unattended by consciousness they are not, remarks Tissot, epileptic. This is true generally but not always. In typical cases unconsciousness is absolute and no remembrance is retained of what passed during the crisis. Rarely it happens, as in the following types, that the patient remembers what happens during the crisis, but is oblivious of it afterward. Here exists a consecutive amnesia. In other cases remembrance of the crisis is retained. This last phenomenon, while rare, characterizes certain atypic epilepsies. These have long been noted. Foville¹ noted the case of an epileptic crisis of which consciousness was retained. There was marked neuralgia which persisted during the attack. Clark² has reported a similar case. C. H. Hughes³ in 1881 associated a number of cases in which these phenomena were indisputable. For him presence of unconsciousness in epilepsy is not an essential feature of the disorder. He reports an epileptic attack with fixed extremities of which full consciousness was retained. He also remarks that after treatment certain epileptics with grand mal present attenuated attacks during which they are conscious and of which they retain remembrance. B. Ball⁴, while regarding as of exceptional occurrence memory after epileptic attacks, cites several instances. He correlates this with similar phenomena in somnambulism. Joffroy⁵ has also observed similar cases. Bombarda⁶ has reported two cases in which generalized epileptics had more or less consciousness of the attack. Hennocq⁷ has reported similar cases where replies were

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1. *Ann. Medico Psych.*, 1869.
 2. *Alienist and Neurologist*, July, 1880.
 3. *Alienist and Neurologist*, April, 1881.
 4. *Ann. Medico Psych.*, 1888.
 5. *Ann. Medico Psych.*, 1894.
 6. *Revue Neurol.*, Dec., 1894.
 7. *Thésé de Lille*, 1894.

made beneath locked teeth. Lemoine,⁸ L. P. Clark,⁹ H. M. Bannister,¹⁰ Séglas,¹¹ Nageatte,¹² and Ducoste,¹³ all hold the opinion that amnesia is not pathognomonic of epilepsy. Recently Andenino,¹⁴ reports three cases in which consciousness was retained. In one the patient could talk during the attack. The two others couldn't talk, but could tell after the attack what had happened, but the patient did not respond to interrogations. He gurgled and fell back into profound sleep of a half hour's duration from which he awoke without knowledge of what had occurred. Motor disturbance may be so slight and brief that it passes unobserved so that apoplectiform attacks co-exist with convulsive features. Certain patients who seemingly present no motor phenomena often bite their tongues—sufficient evidence of convulsive phenomena.

In a type described by Maisonneuve¹⁵ the clonic and tonic phases are replaced by a general trembling of short duration, the extremities meanwhile remaining relaxed. In one case the patient was seized suddenly; the whole body trembled, the face paled, the eyes closed. Then the agitation ceased and for half an hour he might have been taken for dead, but for the tranquil respiration. In a case at the necropsy of which cerebral and cerebellar tubercle was found consciousness was retained in the course of certain crises. In these, convulsions were more intense than in those with loss of consciousness. Sometimes consciousness was lost only at the end of the crisis. One of M. Olivier's¹⁶ patients presented two sorts of crisis. In one consciousness was completely lost. In the other it was sufficiently preserved to enable the patient to answer questions put to him. In a status case attended by rise of temperature I noted that the patient preserved enough consciousness to reply to

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8. Bull. de Med. Ment., Belgique, 1895.
 9. N. Y. Med. Jour., Sept. 18, 1897.
 10. Amer. Jour. of Insanity, Jan., 1897.
 11. Ann. d'Hgyiene Pub., May, 1897
 12. Progrès Med., Jan. 10, 1907.
 13. Thèse de Paris, 1899.
 14. Arch. di Psich., 1906.
 15. Epilepsie, Paris, 1803.
 16. Ann. Medico Chir. du Centre, Aug. 5, 1906.

questions. The status had lasted nine hours during which forty-five attacks had occurred in series of from five to ten. They did not have the same peculiarities. Some, particularly those at the onset of the status, were of classic type. They were of brief duration, but attended by loss of consciousness. True stertor did not occur. The patient immediately understands thereafter questions which are put to him and responds to them. The other attacks, the latter particularly, are incomplete. The tonic and clonic phases are less intense, unaccompanied with loss of consciousness. The arms are particularly affected. During them the patient responds to questions. When I reported the case I was of opinion that the patient had cerebellar symptoms. Progress of the disease did not confirm this opinion. Epileptic dementia was dominant. The symptoms observed might have been produced by diffuse cerebral lesions. Atypic attacks occur where there co-exist consciousness and inability to move. Did such attacks not alternate with epilepsy they could not be referred to an epileptic origin. A typical epileptic fell before me once seemingly unconscious. The face was pale, eyes half turned not reacting to irritation, pulse rapid and compressible, respiration normal. The raised muscles fell by their own weight. Sensibility seemed absent. This lasted a few minutes when the patient moved and began to talk. He had heard all that had gone on around him during the attack and had fully remembered. L. Wiltkowski¹⁷ has reported a very similar case who had a momentary paralysis sometimes unilateral, sometimes bilateral. Such attacks may be taken for hysteria, especially when the patient complains of a globus and has visual and auditory hallucinations. Billod¹⁸ has called this type hysteriform. These cases show that epilepsy at times presents a paroxysmal rather than a disease type. Many of the so-called pathognomonic symptoms may be absent. Loss of consciousness and post-paroxysmal amnesia, the classic signs, may be lacking in some cases. Such cases are rare and usually associated with the appearance of classic symptoms at other times.

17. *Neurol. Zentralblatt*, 1884.

18. *Gaz. des Hôp.*, Jan., 1843.

THE CARNEGIE FOUNDATION AND THE PHILADELPHIA MEDICAL SCHOOLS.

SELECTED WITH COMMENTS BY THE EDITOR OF *The A. & N.*

“**A** SWEEPING attack on the evils of Pennsylvania’s politically-juggled medical charity is embodied in a report which the Carnegie Foundation for the advancement of teaching issues on the subject of medical education in the United States and Canada. The Keystone State is described, according to the report, as one of the worst offenders in turning loose on the community, through this wedlock of business and politics, a class of ill-trained doctors who are little less than quacks when the menace they are to the health of the confiding public is considered.

“The report which makes these startling charges is the result of investigations by Abraham Flexner.”

“If this newspaper report is true, when Mr. Flexner makes the statement that the Keystone State is “turning loose on the community . . . a class of ill-trained doctors who are little less than quacks,” he is guilty of gross misrepresentation. The whole field of medical literature, the records of the Boards of Medical Examiners of all States supplied with such, those of admission Boards of the Army, Navy and Marine Hospital Service, and of all hospitals throughout the land, are available to demonstrate the high standard of Philadelphia’s medical graduates. The State Examiner’s records, as Mr. Flexner could have readily ascertained, indicate in fact that physicians—both male and female—trained in this city, stand with the foremost in their general averages.”

“The deductions of Mr. Flexner are as fallacious as his estimate of the standing of our medical schools is misleading. He tells us that out of the 155 medical colleges in

the United States "fewer than 30 have acceptable hospital facilities," and yet he decries as "thoroughly objectionable and demoralizing" the fact that the State of Pennsylvania has for years "been distributing large sums" which have enabled Philadelphia schools to build and partly to maintain their own hospitals. What nobler purposes can public money be devoted to than to facilitate both the skilled treatment of the poor and facilities for adequate practical teaching of applied medicine? Partly through this State beneficence each Philadelphia school is equipped with a modern hospital, and one of them (Temple University), with two—to say nothing of the Philadelphia General Hospital, one of the richest clinical fields in the world and other fine hospitals—open to all colleges. To this fact is due, indeed, much of Philadelphia's leading position as a teaching center."

"Mr. Flexner's view that "consolidation" of medical schools is the proper course to follow serves but to show that his whole fabric is based on pure conjecture. If he fathomed the teachings of centuries of practical experience—that of Europe—he would have become familiar with the evils of concentration. Within the last few weeks the writer saw the main courtyard of the Paris Medical School filled with troops, police and "plain clothes men" to preserve order during an "examination" for *agrégés*, so intense was the feeling among the general profession and students against a system which enabled what they termed "pontiffs," "the elect"—the faculty, in other words—to arbitrarily select whom they pleased for these important teaching positions. It is the "boss" system personified, even though the "bosses" here are high-classed men, who think, at least, that they are serving the best interest of the school. In our country the results of "concentration," of which Mr. Flexner's plan would be the initial step, would prove far more pernicious, for it is not the modest and learned scientist who would reach the apex of power, but the hustling, ignorant wire-puller. Briefly, France is chafing and trying to rid herself of the very educational aristocracy—which even at best condemns a multitude of excellent men to effacement regardless of their ability—that Mr. Flexner and other theorists, in total ignor-

ance of the teachings of experience, want to impose upon us with the aid of Mr. Carnegie's money!"

"What experience *has* taught, is that *the small medical school with ample hospital facilities is the ideal one*. Each student can receive individual attention from the teaching staff, come into contact with patients, and have a sufficient number of these at his disposal to acquire practical experience worthy of the name. The writer will never forget his first two years of study, spent in the medical department of the University of California, then known as the Toland Medical College of San Francisco. There were but 60 students all told, and these had at their disposal the city and county hospital, containing some 360 beds. Besides attending didactic and clinical lectures and being "quizzed" by his teachers, the student was given charge of cases (only figuratively, of course) and had to report them in full before his clinical chiefs and fellow students, stand the fire of their criticisms and defend himself as best he could. If this did not inculcate practical knowledge, "engrave it on the tablets of his memory," as Professor R. Beverly Cole used to say, nothing could. This was thirty-four years ago. The best European medical schools are steadily approaching this ideal and essentially American plan. It represents also the trend of *all* Philadelphia medical schools; each is doing its utmost to raise its own standard, which is already on a par with that of many European schools. Indeed, the records of our State Boards suggest even a better relative standard, for while, as stated, Philadelphia graduates are among the foremost in examination averages, European graduates fail with comparative frequency, and those who do pass seldom exceed considerably the passing mark."

"On the whole, if Mr. Carnegie wishes to benefit the medical profession at all, and through it suffering mankind, it will not be by accepting the statements of his misinformed agents. He should first realize that immense progress has been made in the United States during the last twenty years in matters of medical education, and that his munificences will prove most useful if they are employed to supply that which is *still needed* to raise our medical schools to the stand-

ard hoped for by their teachers, who, better than any one, are able to discern defects and indicate where improvements might be introduced.—*C. E. de Sajous Editorial in the Monthly Encyclopedia*, July, 1910."

The author makes some practical recommendations from the standpoint of practical medicine teaching experience which we are obliged to omit. But the trend of this and all medical teaching experience is that medical teachers know better the needs of schools for medical practitioners than pedagogic dilettantes in matters medical.

The medical schools of Philadelphia do not merit this attack, not even the College of Physicians and Surgeons, which was especially singled out by the representatives of the foundation. The medical men and the means of the Philadelphia schools have been good and great in professional esteem. They have made good and great men in medicine for more than a century. From the great Benjamin Rush to the present day Philadelphia has been a shrine of medical devotion, the Aesculapean Mecca of many devoted pilgrimages. It was giving out scientific light and benediction to the pilgrims from the east, south and west when darkness elsewhere overshadowed the American medical world; the light of the independent schools can not be extinguished at the fiat of a not clinically illumined *litterateur*, only managing a steel trust magnate's munificent foundation for a literary and general scientific education. The medical literature of one of the best and oldest medical publishing houses in the United States imprints on the title pages of its book "*Que prosunt omnibus.*" What the country wants are medical universities whose chief aim is to make really efficient doctors, taught to select from all sources, all possible light of the sciences and employing this light so that it can be utilized exclusively in the great art of combating, preventing and curing disease.

It were better that some of the hours be taken, if not otherwise obtainable, from technical laboratory work, even biological, provided the student did not escape learning the right deductions from laboratory results, than that he go out into the world ignorant of the essential clinical aids to

diagnostic discernment, symptomatic differentiation and therapy.

The clinical sides of the art of medicine, especially in their diagnostic, prognostic, therapeutic, semiologic and preventive aspects including fact or deduction connected with all scientific discovery and law, are the essentials of the doctor's acquisitions. For his art, clinical skill, rather than literary or scientific embellishment is the aim of the doctor, though it were better that he have both and a clinic, as now understood, pertains to something more than the bedside or the practice of medicine or patients in bed or in hospitals, though anciently it meant deathbed baptism, and means so now, in the hands of some of the new light and new thought practitioners.

Our business is to postpone so long and so effectively as we can the baptism of death or even of thanatopsis in the way of suggestion and to enable the clinic to take up or cast aside his bed and go about his daily business. In collecting the knowledge for this salutary work the medical student has much to do beside the detail technical work of the biologic and other laboratories, though he must needs learn what he can of them. The problem now paramountly before medical student instructors is how to glean, concentrate, condense and impart from the much knowledge available what the student of medicine must have and can appropriate in the time at his disposal, without requiring him to spend so many years at study, that ambition to practice medicine may flee from him and he become a mere laboratory worker studying the wonders of medicine and its collateral science research, without inclination or ability to employ efficiently its latter day marvellous revelations and resources for the mental and physical welfare and sanitary salvation of man. Medicine is now preaching from the light of its laboratories of chemical, biological and clinical research a new and patent doctrine of human salvation, despite the rising up of the false beliefs and fads and fancies of the so-called *new* but *old* thought fallacies of mental healing miscalled psychopathy, christopathy or Christian Science, blasphemously so-called, etc., etc., *ad nauseam*.

SELECTIONS.

CLINICAL NEUROLOGY.

PERSISTENT KNEE-JERKS IN TABES.—The patient was a man aged fifty-six, a stone-mason, who came under observation on July 16. At that time his mental condition prevented him from giving any very clear account of himself or of his family, but it appeared he had been a soldier and had lived abroad, and had there suffered from intermittent fever and also from a chancre, which had left little or no scar, and which had been followed by comparatively slight secondary symptoms. Apparently his locomotor ataxy dated back at least ten years, for at that time he had a perforating ulcer on the left foot, which got well only after prolonged treatment. About the same time he also experienced lightning pains which came on in paroxysms and prevented him from sleeping at night, and these had occurred at intervals on and off since. He had also had diplopia at that time; that is to say, ten years before his admission. From then onwards he had from time to time been laid up in bed and had been a frequent inmate of various hospitals. Latterly he had suffered from girdle pains and from pains in his upper limbs similar to those in his legs. Bladder symptoms had been a prominent feature of the case almost from its beginning; they had been very troublesome and presented varying degrees of incontinence of the urine, of retention of the urine, and of dysuria. There had also been visceral crises, of which the most striking had been gastric; these set in two years before his final admission. He had also had acute rectal crises accompanied by attacks of piles.

When seen on July 16 the patient looked older than he really was owing to the whiteness of his hair, and he seemed thin and old with a cachectic, almost cancerous, facies. His main complaint was his bladder. He was obliged to adopt all sorts of attitudes in order to micturate and the passage of his urine caused him much pain. There was at this time retention with overflow, and the urine contained both blood and pus. The patient's liver and spleen were both enlarged, the heart presented the typical signs of aortic regurgitation, and there were apical rales suggestive of phthisis, the latter diagnosis being confirmed by the discovery of tubercle bacilli in the sputum. The pupils were of the Argyll-Robertson type, reacting fairly well to accommodation, but not to light. The patient could walk, but with typical tabetic gait. Romberg's sign was present, but not very marked, and when the patient was lying in bed inco-ordination was not very obvious. The perforated ulcer on his foot was quite healed.

The knee-jerks were examined on many occasions, and they were always present and of normal strength without any diminution or inequality. The plantar reflexes were flexor. At night there was now delirium of a low muttering type; catheterisation was necessary; but in spite of treatment the patient sank and died partly from uræmic trouble and partly from exhaustion from his heart and lung disease. At the post-mortem examination the diagnosis of phthisis was confirmed; the heart weighed 560 grams, and there was aortic regurgitation due to syphilitic aortitis. The kidneys, the ureters, and the bladder were in a state of acute pyelonephritic inflammation. The brain looked perfectly healthy and was of normal weight. The spinal cord was obviously diminished in volume, and even the naked eye could detect atrophy of the posterior columns and roots.

The histological examination confirmed these spinal cord changes. The essential lesions were in the posterior roots and columns; they varied much in the different regions of the cord, being most marked in the sacral and lower lumbar regions, less marked in the upper lumbar and lower dorsal, and more marked again in the upper dorsal and in the cervical regions. The changes were typical of *tabes dorsalis*.

How, then, can the preservation of the knee-jerks here be accounted for?

Normally the sensori-motor reflex path upon which the knee-jerk depends—even though it is not in the strict sense of the word a true reflex—consists of the posterior nerve roots, the ending of these fibres in the cord, the connecting fibres between these and the anterior cornual cells, the latter cells themselves in the upper part of the lumbar enlargement, the fibres issuing from them in the anterior nerve roots and passing thence to the anterior crural nerve supplying the quadriceps extensor femoris muscle; if any part of this arc is broken, the knee-jerk disappears. Such destruction as a rule occurs in locomotor ataxy owing to the lesions in the posterior nerve roots and in the cord itself in the region of the point of entry of the posterior nerve roots. If, then, the loss of knee-jerks is typical in tabes, why can they in exceptional cases persist?

A PROBABLE EXPLANATION.

In certain cases of locomotor ataxy the knee-jerk having been abolished for a longer or shorter time, has reappeared as a result of some cerebral complication. It has been supposed, therefore, that the abolition of the knee-jerk in these cases of tabes is due to changes in the cord itself rather than in the posterior nerve roots; and that when the cerebral lesion occurs the cortical inhibition of the spinal centres is removed so that the medullary reflex activity becomes sufficiently increased again to bring the knee-jerks back.

This explanation does not, however, cover those cases in which the knee-jerks have been retained without ever having disappeared at all. Westphal has shown that there exists in the upper part of the lumbar enlargement of the spinal cord a region, the destruction of which determines the disappearance of the knee-jerks. The most important part of this region is that to which the term posterior root zone has been applied, and it has been stated by some authorities that whenever the knee-jerks have been preserved this posterior root zone has remained intact in the upper part of the lumbar enlargement. There have even been cases in which the knee-jerk has been retained on one side and lost on the

other, the absence of the corresponding posterior root zone and the presence of the other being confirmed by post-mortem examination.

In the case described above the posterior root zones had escaped injury on both sides of the lumbar enlargement.

Cases of tabes with preservation of the knee-jerks are by no means exceptional; though, as one might expect, in proportion as the disease progresses the knee-jerks tend to disappear.—*The Hospital*.

SYMPTOMATOLOGY OF ACUTE ANTERIOR POLIOMYELITIS,
—Foerster, O.: (*Berlin. Klin. Woch.*, December 6, 1909.
p. 2,180, *Archiv Pediatrics*.)

In the author's cases the meningeal symptoms were well marked, not only at the onset of the disease, but also during the whole course, and in a few cases even after the symptoms of paralysis had disappeared. Among these symptoms were pain and rigidity of the neck, hyperextension of head, especially when the attempt was made to lift the upper part of the body by means of the arms. Pain in the back was likewise complained of, especially on passive motion. All the painful muscles were also tender. The Kernig sign was present in a few cases. The condition so closely simulated cerebro-spinal meningitis that in some cases lumbar puncture was resorted to as a diagnostic aid. The cerebro-spinal fluid was clear under considerable pressure and contained an increased number of lymphocytes. The knee-jerk was not always absent. Ankle clonus was often present at the beginning of the attack and sometimes after the paralysis had disappeared. The Babinski sign was observed at one time or another in all of the cases.

The author saw not a few cases with protracted evolution, *i. e.*, where the height of paralysis was not reached before the tenth or twelfth day. Relapses with renewed fever and fresh paralysis were not rare.

The author calls attention to a few characteristics of the paralysis. The foot is often spared, when all other parts of the lower extremities are involved. Even when a part of

the foot is involved, the toes always remain free from paralysis. The same conditions are seen in the upper extremities.

An interesting series of cases is that of paralysis of the muscles of the abdominal wall. The author saw four cases in which the paralysis began in this part of the body. The symptoms were dome-shaped abdomen, with bulging during crying or coughing. These patients could not get up from the reclining posture without aid. Marked constipation, not much influenced by laxatives, was usually associated with this condition.—*Current Literature Abstract in Pediatrics*.

TREATMENT OF INFANTILE PARALYSIS.—(*La Clin. Infant.*, April 1, No. 7, p. 222).—Dr. Laquerriere lays down the following: (1) At the onset during the febrile stage one remedy alone is of service—hydrotherapy practised under the form either of tepid baths or refrigeration of the vertebral column by a bag applied to it. (2) In the succeeding weeks after the cessation of the fever, when the paralysis, at first general, becomes spontaneously localized to certain muscles, all fatigue and worry must be avoided so as to allow the medullary cells, which are simply inhibited, to recover their function, and so as not to over-work muscles which will recover by themselves. At this stage hydrotherapy in the form of warm or tepid baths, especially salt ones, and electricity by means of the constant current applied gradually, possess at the same time a tonic and sedative action which demands their employment to the exclusion of any other procedure. (3) In the stage of slow retrogression there is no fear of lighting up the medullary process, as the lesions are established and circumscribed. The general health must be attended to; sea or mountain air, warm salt baths, sea baths, sun baths, are the most powerful means of toning the organism. The nutrition of the affected limbs must be acted on by massage, passive movements, douches, the constant current, one pole on the limb and the other on the vertebral column. Articular deformities must be attended to by manual treatment, mechanico-therapy, and careful watching for faulty attitudes. Motility must be encouraged by electricity, gymnastics being rarely available for the

wasted and weak muscles. (4) In the last stage, that is, three or four years after the onset, the muscles which have completely or partially recovered should be re-educated by simple or electrical means. Deformed articulations must be subjected to mechanico-therapy by orthopedic apparatus or surgical means. Muscles still affected must be still subjected to electrical treatment or transplantation of tendons. (5) This treatment should be commenced as soon as possible; infants thus treated in the first weeks escape the worse consequences of the disease. But even a late commencement may be followed by considerable success.—*Pediatric's Abstract*.

TABES DORSALIS: ITS RATIONAL TREATMENT IN THE LIGHT OF ITS REAL PATHOGENESIS.—By Tom A. Williams, M. B., C. M. Edin., Washington, D. C. Read before the British Medical Association at Belfast, July, 1909. Published International Clinics, 1910. XX Series, Vol. 1. April.

A discussion and rejection of the pathological view enunciated by Ferrier and by Mott in the *British Medical Journal* of 1906 and 1909. The illustrations (from Nageotte), clearly show the presence of chronic peri and endo neuritis of both anterior and posterior spinal roots secondary to diffuse meningitis. Effective physiological regeneration is however, possible only in anterior root. It stops short in the posterior root fibres at the point where the neurilemma is lost. A dystrophic explanation is thus negatived. It is a syphilitic process; and instances illustrate its early occurrence. The long course of the photo reflex arc explains the frequency of its impairment, which is long preceded by the lymphocytosis which reveals meningitis. Metastases need not be invoked. The percentage of tabetics is no lower than that of cirrhotics; where then is the justification for invoking a special degenerative predisposition of the noble elements in tabes rather than in hepatic or other cirrhosis? Again, a habit of increased catabolism ending in decay does not seem compatible with the regeneration found in tabetic roots. Is not the excess of lipid more reasonably explained by the increased breaking down of cells by an inflammatory process?

To adopt the dystrophic theory is to reject specific medication, which experience is now showing to be a success, contrary to former beliefs. Its former failures were due, perhaps, to less efficient methods of exhibition. Mercury must be given with a minimum of digestive disturbance and to a maximum of controllable saturation. The author advocates intramuscular injections, and in fulminant cases, the intravenous route. Several cases are quoted from the literature; and the author's own cases have been almost uniformly encouraging. In prognosis, it must be remembered that destroyed tracts and sclerosed blood vessels cannot be repaired; but experience shows that the disease process can be arrested. —*Author's Abstract.*

DR. MARC RAY HUGHES' CONCEPTION OF EPILEPSY.—Professor of Mental and Nervous Diseases Barnes University (Medical Department); Professor of Criminal Anthropology and Forensic Medicine, Benton College of Law. Epilepsy is a functional vaso-motor disease, an alternating vaso-motor condition of transitory paresis or paralysis and irritation, the irritation causing contraction of the arteriole supply of the convulsive area involved, and the extreme ventricular dilations, caused by excess of cerebro-spinal fluid in them, producing the coma and comatose symptoms.

A trauma or a blood toxine (auto-toxine or chemical-like alcohol, camphor, absinthe, amon. carb., intra-venous injections, etc.), or a peripheral irritation, faradism and galvanism, intra or extra intestinal, tapeworm, lumbricoid fistula in ano, etc., causes first a paralyzing impression on the vaso-motor mechanism of the brain blood supply or on the heart (cardiac epilepsy), causing the excessive pouring out of the cerebro-spinal fluid into the peri-vascular spaces and ventricles of the brain.

The distended ventricles or perivascular spaces by pressure give rise to the precursory aura, visual, auditory, gustatory, and other sensory forms, according to the part first feeling the pressure before coma comes on from excessive pressure.

The excessive pressure with the coma or comatose states

irritates the vaso-motor centers of the brain, causing arteriole contraction and spasm of psychomotor centers, and of parapsychic centers of the gray cortex, causing psychical epileptic automatism (vertiginous epilepsy).

This arteriole contraction, the result of primary distention, and the excess of cerebro-spinal fluid in the ventricles, cause the shutting off of the excessive cerebro-spinal secretion, and the return of the brain to its normal state after a period of more or less prolonged sleep, according to the degree of vaso-motor anemia induced, the absorption and redistribution of the excessive fluid of the ventricles beginning again with the arteriole contraction, which, after the ventricular distention, and in consequence of it, first took place.

NEPHRITIS.—Casper calls attention principally to two special forms of nephritis, a chronic hematuric variety without albumin, tube-casts, edema or other signs of disturbances in the circulation. Hemorrhage in one or the other kidney alternately seems to be the only trouble, the urine in the intervals, which may be months or years, being apparently normal. In the other variety the pathologic changes are so minute sometimes that they escape discovery at autopsy, but a circumscribed nephrosis is responsible for the hemorrhages. This condition is called by the French "*néphrite parcellaire*," but, Casper asserts, it is certainly not a nephritis. In these cases the hemorrhage occurs always from the same kidney. It is generally more profuse and persistent than the above hematuric nephritis; clots collect in the bladder and may clog the outlet, the kidneys are not palpable or tender and the urine in the intervals is absolutely normal. The apparent similarity between these two affections with their single symptom, hemorrhage, is due only to the fact that the tests for examining the urine in hematuric nephritis have not been sufficiently delicate. More sensitive tests will reveal minute amounts of blood and tube-casts. The prognosis for both affections is good as a rule; it is extremely rare that the hemorrhage is so intense as to require an operation. Pain in the kidney due to nephritis is generally a dull ache, more pronounced after physical exertion and subsiding during rest. But nephritis

may at times induce a typical colic though the urine is free from pathologic content. With stone colic red corpuscles are always to be found in it. After the attack has subsided, examination of the urine with sensitive tests (20 per cent. sulpho-salicylic acid), will reveal traces of nephritic albumin and tube-casts. This colic nephritis may be associated with the hematuric nephritis; the colic is the result of sudden edema of the kidney. In conclusion he expatiates on the good prognosis of chronic nephritis in many cases; the kidneys may become contracted in time but not until after several decades, during which the patient feels well. The vascular system, heart and blood-pressure behave as in normal conditions; the albuminuria is often a casual discovery. All this applies especially to the arterio-sclerotic kidney; the patients may reach the age that their other vital organs allow. The atrophic process in the kidney corresponds merely to the normal changes with age in the other organs.—*Munch. Med. Woch.* October, 1909.

APROPOS THE FOLLOWING miscarriage of justice in St. Louis may here be recorded.

No record of a basal brain autopsy is given in this case and no adequate consideration is given to the significance of cerebral violence in this region and the cerebro-psychic shock of a blow here to a small man from the strong arm of a comparatively athletic giant.

After the assailant, 19 years old, was exonerated yesterday by a coronoer's jury of any blame in connection with the death of William Gerkin, the Tower Grove line conductor, who died of nephritis early Thursday morning a few hours after he had struck him on the jaw, Assistant Circuit Attorney Roskopf announced that he would present the case before the grand jury. The assailant was placed under arrest at the coroner's office.

Until the report of a post-mortem was returned to the coroner it was thought that the blow which fractured Gerkin's jaw had caused his death. Kidney disease is given as the cause of death in the autopsy report. The jury found that the blow did not hasten the conductor's death.

The assailant declared on the stand that the conductor had twice called him a "liar." They had a dispute as to whether or not he had paid his fare, he said, and when the conductor became insulting he struck him in the face.

"I am ashamed of myself for striking the conductor, who was much smaller than I am," the youth testified.

According to this wise coroner's jury's conclusion a man must be well when struck by a fisticuff bully, whose glory is in his strength, in order to hold the assailant responsible for precipitating death by a blow.

But for this untimely violent blow who can say that the recipient thereof might not have recovered of his kidney disease, which was not so grave as to compel him to abandon his daily avocation.

. THE PATELLAR REFLEX IN FUNCTIONAL DISORDERS.—

According to Wohlwill, in the *Neurologisches Centralblatt*, absence of the patellar reflexes in functional nervous disorders would seem to be generally admitted, though the condition is rare. But few cases have been reported, and in the majority of these the condition was not permanent, but showed variations in the presence of the reflexes from time to time. As an example, he reports a case of his own. The patient, a girl of twelve, had for two years before examination been subject to convulsions which had suddenly ceased. She then developed attacks of apprehensiveness accompanied by peculiar sensations as if she must fly or fall. At times the attacks were repeated frequently in the course of a single day. No other symptoms were complained of. On examination both patellar and Achilles reflexes were absent. A diminished tonus of the muscles of both legs was noticed. Pain sensibility was diminished generally. Pupil reflexes were normal, and in all other respects the results of neurological examination were negative, as were also lumbar puncture and Wassermann's reaction. On a second examination three days later patellar and Achilles reflexes were present and brisk, and muscle tonus was normal. During the following six weeks repeated examinations were made at frequent in-

tervals, and on some occasions either the right or left patellar reflexes were found to be present, though never both at the same time, and twice it was noticed that both were absent. The Achilles reflex behaved in a similar manner. As the result of psycho-therapeutic treatment the attacks ceased, but the patellar reflexes continued to be absent. Treatment was discontinued after six weeks, and a month later both reflexes were normal. Seen again after another month, only the right reflex was present, and the attacks had again returned.—*The Hospital*.

NEURASTHENIA FROM INSUFFICIENCY OF THE SALIVARY GLANDS.—Baccarani's experience has convinced him that the salivary glands have an important part in the elimination of toxic products generated in the body, and that their internal secretion is indispensable for the normal functioning of the economy. Absence of this internal secretion is liable to induce a syndrome in which neurasthenia predominates, as in a case he describes in the *Riforma Medica* for July 6. In extreme cases the metabolism may become gravely affected. Zagari has reported a fatal case of this kind, already mentioned in these columns.

THE THALAMIC SYNDROME. By Smith Ely Jelliffe, M. D., Ph. D., New York, Attending Neurologist, City Hospital, New York; Assistant New York Neurological Institute; Clinical Professor of Psychiatry, Fordham University.

The description of the thalamic syndrome, first conceived by Déjerine in 1903; made more precise, and apparently named for the first time by him and Thomas before the February 4, 1904, séance of the Paris Neurological Society, and finally elaborated by Déjerine and Roussy in 1906 on the basis of the histological examination of the first case of Déjerine and Egger, and by Roussy in his *Interne Thesis*, is one of the most striking of the recent contributions to clinical neurology and to the anatomy and physiology of the sensory components of the central nervous system. Some eighteen to twenty cases of this syndrome have been reported, of which four are by Coriat, of the United States. The author

thinks a critical analysis will undoubtedly reduce the number somewhat. He gives the present available studies on this syndrome as about a dozen and makes an abstract reference to their source and authorship, but as the subject is copyrighted we can go no further. This excellent monograph begins with a case recorded by Dr. E. C. Fossett, of New York.

CLINICAL PSYCHIATRY.

INEBRIETY AS A CAUSE OF CRIME, race degeneration and disease is receiving constant investigation. Three states, Massachusetts, Iowa and Minnesota, have provided special hospitals for the care and reformation of habitual inebriates. Slowly economic considerations are compelling attention to the fact that inebriety is a disease and not a crime, and that the accidental or occasional inebriate should be cared for as a sick person and not as a felon. This same care of the alcoholic is especially required between the time of arrest and his commitment or discharge. Too frequently is hasty judgment by an incompetent policeman or an over-confident ambulance surgeon the cause of an alcoholic being thrown into a cell to die of fracture of the skull or other injury or disease that was not apparent immediately after the ataxic man had fallen.

Every inebriate is entitled to medical attention, the essential feature of which is competent observation. Either municipal hospitals should possess observation wards for alcoholics or the jails should have hospital facilities for safeguarding the life of the victim of alcoholism. The odor of alcohol on the breath of an unconscious man does not *per se* constitute intoxication. The law holds a man to be innocent until proven guilty. To give the stuporous man the benefit of the doubt is to give him adequate treatment by a competent observer. The law should not jeopardize a life even with the sanction of the ambulance surgeon.—*American Journal of Surgery*.

EYE AFFECTIONS IN THE INSANE.—In the *Cronica Medico-Quirurgica de la Habana* Dr. Fernandez describes the affec-

tions of the eyes he has met with in examining some two hundred insane patients. While diseases of the lachrymal apparatus are not very common, blepharitis is frequently seen, which he attributes to the habits of this kind of patient. Ectropion is exceedingly common, due, he thinks, to the frequency with which the insane strike each other. He met with few cases of trachoma despite the increase of the disease in Cuba of late. Pterygium was frequent, as were corneal affections. Cataract was common, and he operated on four cases with good results. He expresses his astonishment at the number of cases in which he came across increased retinal sensibility.

RECOVERY RATE IN VARIOUS PSYCHOSES at Manhattan State Hospital, 1909. Patients when convalescent are brought before the staff for a final review of the case. Particular inquiry is then made regarding the completeness of the recovery and the degree of insight. Patients are paroled for from three to six months and required to report to the hospital at intervals. Final decision as to whether recovery has actually taken place or not is reserved until the termination of the parole period. The appended table shows the percentage of recoveries attained in the various groups. The aliens, who remain as a rule only a few weeks under treatment, have been excluded in the calculation.

The manic-depressive, alcoholic, infective-exhaustive and undifferentiated depression groups furnish the bulk of the recoveries. The relatively low recovery rate in the manic-depressive group shown in the column for the women is due largely to early release and transfer of cases to other hospitals. The correct percentage for the manic-depressive group appears to be between 90 and 95 per cent. The unrecovered cases tend to run a chronic course or fail to gain complete insight; occasionally paranoid residuals are present. The dementia praecox group, as at present formed, yields no recoveries. The allied to dementia praecox group, on the other hand, shows about 65 per cent of cases recovered. The cases which we group as depressive hallucinosis appear to have a uniformly good prognosis.

	NUMBER DIS- CHARGED (exclus- ive of aliens de- ported		PER CENT RECOVERED	
	Men	Women	Men	Women
Manic-depressive psychoses.....	39	80	92.31	88.75
Allied to manic-depressive.....	14	24	85.71	79.16
Dementia praecox.....	29	19	00.00	00.00
Allied to dementia praecox.....	5	10	60.00	70.00
Alcoholic psychoses.....	34	21	67.64	61.90
Dementia paralytica.....	18	6	00.00	00.00
Senile psychoses.....	.....	3	00.00	00.00
Constitutional disorders and episodes in inferiors.....	16	12	62.50	25.00
Depressions undifferentiated.....	6	14	83.00	71.43
Infective-exhaustive and allied group.....	3	22	100.00	68.18
Depressive hallucinosis.....	4	3	100.00	100.00
All other groups.....	24	34	33.00	32.35
Not insane.....	6	1	00.00	00.00

PSYCHOSES AMONG ALIENS.—It is interesting to note what types of mental disturbance recent arrivals in this country are liable to develop. The hardships which many of these individuals undergo need not be dwelt upon. Russian Jews and Italians furnish a majority of insane aliens. Most of them are illiterate and many of them impress one as being constitutionally inferior; this, however, is a point difficult to settle because we can not of course use the same standards or apply the same tests that we do to native-born patients. Moreover, accurate information concerning the early life of the alien is often lacking. Most of the cases included here had been only a few weeks or months in the United States. Persons who become insane within three years after landing are legally deportable.

During the year 117 aliens were deported. The diagnoses made in these cases are given in the accompanying table. Dementia praecox ranks first with 33 cases, or 28 per cent of the total number. This must be considered a relatively high figure, as dementia praecox was diagnosed in only 15 per cent. of all cases admitted to the hospital during the year. The proportion of manic-depressive cases among the aliens appears practically the same as among the total admissions. Constitutional inferiority was diagnosed in 5.9 per cent of the aliens as against 4.6 per cent of the whole number admitted during the year.

	Men	Women	Total
Dementia præcox.....	19	14	33
Allied to dementia præcox.....	2	9	11
Manic-depressive psychoses.....	6	12	18
Allied to manic-depressive.....	3	6	9
Depressions undifferentiated.....	4	6	10
Constitutional inferiorities.....	5	2	7
Alcoholic psychoses.....	3	1	4
Infective-exhaustive and allied conditions.....	1	4	5
Epileptic psychoses.....	.....	1	1
Dementia paralytica.....	3	2	5
Depressive hallucinoses.....	2	1	3
Paranoic conditions.....	2	1	3
Involution melancholia.....	.....	1	1
Imbecility.....	1	.....	1
Unclassified.....	3	3	6
Total.....	54	63	117

—*Manhattan State Hospital Report, 1909.*

DEMENTIA PRAECOX at Manhattan State Hospital. Superintendent Dr. Wm. Mabon's report. One of the interesting results of the review of the cases admitted to this institution during the year 1909 was to find that dementia præcox no longer occupied first place as the largest individual group with which we have to deal. In last year's report a further restriction of the dementia præcox group was mentioned as probable in view of the fact that the diagnosis of dementia præcox had grown steadily less frequent since the high mark of 1904, when the term was first introduced into the diagnostic tables. This progressive shrinkage is readily seen by reference to the following table which shows what per cent of the admissions have been classed as dementia præcox during the past six years in the female department and during the past four years in the male department.

	1904	1905	1906	1907	1908	1909
Women.....	31.8	28.6	23.3	20.7	15.3	12.9
Men.....	.....	.....	24.7	17.4	18.1	17.5

From these percentages it is evident that our conception of what we are justified in calling dementia præcox has undergone a radical change during the past few years. Following the original Kraepelinian exposition, too much significance was undoubtedly formerly attached to individual symptoms without due consideration of the evolution and general setting of these symptoms. We meet many dementia præcox-like disturbances of acute onset presenting, transi-

torily at least, many of the symptoms mentioned by Kraepelin as of diagnostic importance. Paranoid states with hallucinations, odd behavior, mannerisms, fantastic ideas and strange moods and even katatonic-like attacks with negativistic traits, automatic obedience and stupor, are not symptoms of reliable prognostic value unless they can be shown to have developed on a characteristic foundation.

The foundation on which dementia præcox develops and the conditions under which deterioration is liable to occur were first described by Dr. Adolf Meyer. The psycho-biological explanation offered by Dr. Meyer to account for the development of dementia præcox holds that the essential features in its production are mental conflicts, deterioration of concrete interests, absorption in unhealthy ruminations and inadequate habits of mental adjustment, including the morbid reaction of complexes. A peculiar type of mental constitution in which certain significant traits can^{*} already be recognized precedes the final breakdown. Lack of sound instincts, scattered attention, day-dreaming, seclusiveness, fondness for the abstract and mythical, and lack of concrete productivity are characteristic features of this type of individual. The habit deteriorations, the exclusion of normal interests and thinking, which undermine and destroy the personality, undoubtedly react injuriously on the physical economy, probably affecting unfavorably metabolism and the nervous tissue itself. So far no facts have been adduced to indicate that in dementia præcox there is any primary organic lesion, autointoxication or damage of the nervous tissue from toxins.

CONSTITUTIONAL MAKE-UP.

Such a conception as above outlined has naturally aroused greater interest in the study of constitutional make-up and types of personality. Analysis of the data that we are now collecting will, we hope, throw further light on the special characteristics of the dementia præcox constitution. At the present time we can report the following: In 140 dementia præcox patients about whom we were able to secure satisfactory information, we found that 42 per cent were of inferior constitution, as they had failed to keep abreast of

their opportunities, were deficient in mental equipment or of low productive capacity. The above figure does not include the persons who were described simply as seclusive, unsociable, or exhibiting other less noticeable peculiarities in make-up which are found in a large number of dementia præcox cases.

PSYCHOGENIC AND SEXUAL FACTORS IN DEMENTIA PRÆCOX.

Keen interest has also been awakened in the role played by mental causes in dementia præcox. As is well known, Kraepelin considers dementia præcox to be an organic brain disease probably caused by the action of some harmful agent which damages or destroys the nervous elements of the cortex. The absence of any palpable external causes has led Kraepelin to suggest that we have to do with an autointoxication which possibly has some relation to the activity of the reproductive glands.

The Zurich school sees in the symptoms of dementia præcox the reaction of an individual to complexes of ideas having a strong emotional value. Here again some organic disease process is assumed to exist in order to explain why a complex should become morbidly active, and the suggestion is made that possibly a toxin of some sort is responsible for the damage to the nervous system.

The morbid reaction to complexes is, according to Dr. Meyer, one of the signs of the inferior type of mental adjustment which we find has been habitually resorted to by cases of dementia præcox. Careful investigation into what we may call the "inner life" of cases of dementia præcox reveals a surprisingly large number of definitely disturbing factors and unpleasant experiences, among which sexual incidents seem indeed to have played a predominating role.

Excluding the cases yielding no reliable information, we obtained the following data as to etiological factors:

In 60 per cent of the men mental causes seemed to be most important as disturbing factors. Among these cases with mental causes, 63 per cent referred to difficulties in dealing with the sexual instinct. In 80 per cent of the women mental causes predominated in the etiological constellation, and among 65 per cent of these a sexual complex stood out as the most important disturbing element. In these cases

giving evidence of such a complex, actual sexual traumas or episodes were found to have occurred in 70 per cent. It is interesting to note that sexual factors thus appear to play as important a role in the male as in the female cases of dementia præcox, a fact which has been doubted by many in the discussion of the etiology of dementia præcox.

HEREDITY.

In 140 patients about whose family history we had reliable information for one or two generations, we found that nervous or mental disease existed in the antecedents of 52 per cent. This is slightly higher than the figure obtained in the manic-depressive group (49 per cent).

CLINICAL TYPES.

According to the type of symptoms predominating in the clinical picture, the dementia præcox cases were grouped as follows:

	Men	Women	Total
Paranoid type.....	65	37	102
Katatonic type.....	15	11	26
Hebephrenic type.....	6	13	19
Simple deterioration... ..	10	5	15
<hr/>			
Total.....	96	66	162
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A CRITICISM OF FREUD'S PSYCHO-ANALYTIC METHOD (*Die Psychoanalytische Methode Freud*). (Zt. f. die gesamte Neurol. u. Psychiat., Bd. i, Heft 1, 1910.) Isserlin, Max.

This new journal is a successor to the *Zentralblatt für Nervenheilkunde und Psychiatrie*, founded by Dr. Kurella in 1890, and is edited by Prof. Alzheimer and Dr. Lewandowsky.

The first number opens well with several lengthy and valuable papers, as by Alzheimer on diagnostic difficulties in psychiatry, by Hasche-Klunder on the transformation of obsessions into insane delusions, and an elaborate attempt by Weiler to give greater precision to the measurement of the knee-jerk. Especially interesting, perhaps, is this very able and searching criticism of Freud's methods.

The discussion of Freud's views is not, Isserlin begins

by stating, a mere fashion; it really concerns one of the weightiest problems which psycho-pathology has to-day to solve. The cardinal principles of our science are at stake, and the establishment of Freud's doctrines would mean an entire change in our conceptions. For ten years Freud's books found few readers; since 1905 they have become better known, and attracted many followers, while the experiments and observations on his lines at the Zurich Klinik have especially aroused general attention. Isserin carefully traces the growth of Freud's views and the considerable changes they have undergone.

Freud's psychology is specially marked by its peculiar conception of the unconscious; it is for him something incapable of consciousness, something that has been repressed, and it is of sexual character as to its content. The conscious is, for Freud, only a small and fragmentary part of psychic life, unintelligible and absurd until interpreted by what is going on in the unconscious sphere. When so interpreted its absurdities disappear and life becomes rational. Neuroses, dreams, and delusions are masks that cover its real aims. They are, indeed, more than that. Neurosis, dreams, insanity, are aids in the conflict of life, and so become intelligible. They are essential links in a chain which reaches through the entire psychic life. They are thus allied to philosophy and religion, and the psycho-analytic method leads to a comprehensive vision of the entire human soul and its final aims.

We cannot fail to admire this conception, Isserlin proceeds, and we might be content with that admiration if Freud had not applied his conception to definite empirical problems. Then we have to challenge his proofs. Proof is needed both as regards his facts and his method. The main alleged facts are the infantile sexual constitution and the mechanism of symptoms through suppression, conversion and symbolization. The method is the process by which this mechanism is uncovered and interpreted; it chiefly consists in encouraging free, uncompelled associations. The patient takes the leading part and says whatever comes into his head, however absurd; the physician is passive and supplies no clues, but he notes everything, and detects those significant points at which the

patient experiences repulsion in expressing what comes into his head. That there are therapeutic advantages in this method Isserlin does not deny, but they are easily explained, and he points out that while the method has undergone radical changes in Freud's hands the same beneficial effects are still claimed, though if, as Freud now holds, psycho-neurotic conditions are constitutional, organically and chemically based, it is difficult to see how psychic methods can influence them. Isserlin argues, however, that Freud's method is not capable of proving that suppression, in the sense and to the extent claimed, actually takes place, and that there is no way of proving its validity. Even if suppression occurs it has not been established by Freud that his analytic method necessarily leads to the suppressed material. There is no proof. The connection between the symptoms and the suppressed causal facts is pure hypothesis. The psycho-analytic method is not justified and its claims are untenable. Jung's assertion that by Freud's method it is possible to reconstruct the whole psychical complex out of every psychic particle is a dismal error.

Isserlin admits that Freud has, in the conception of "suppression," struck on a great problem, and that in a number of cases, both normal and pathological, it is a fact. The idea of "conversion," to a less extent, has its value, especially in the explanation of hysteria. The doctrine of the significance of sexuality in psycho-neurotic conditions is, however, unproved. Freud's declaration, "With a normal *vita sexualis* neurosis is impossible," should be changed to "In neurosis a normal *vita sexualis* is impossible;" *i. e.*, it is not the *vita sexualis* which is fundamental.

Isserlin believes that Freud's method of investigation and treatment by free association is useful. He recognizes a real and positive kernel in Freud's doctrines. But he holds that while we must not grudge our tribute of admiration to Freud and his school for the energy they have displayed and for their self-sacrificing devotion to an unpopular cause, it is premature to discuss Freud's claims to our gratitude, so long as his method involves a confusing perversion of scientific

maxims.—*Excerpt and Criticism by Havelock Ellis, in Journal of Mental Science, July.*

GENESIS OF HYSTERICAL STATES IN CHILDHOOD AND THEIR RELATION TO FEARS AND OBSESSIONS. By Tom A. Williams, M. B., C. M., Edin., Washington, D. C. Trans. 1st Amer. Nat. Cong. for Study of Exceptional Children. (*Med. Record*, (N. Y.), Aug. 6th, 1910.)

It is in psychasthenia that obsessions and phobias are so insistent a feature. But either may be produced by a quite different mechanism, viz. that of SUGGESTION. They are in that case the direct product of an implanted idea, and have nothing to do with (1) feeling of inadequacy, (2) unreasoning dread, (3) sentiment of strangeness, the fundamental features of psychasthenia.

The morbid emotions which accompany these induced obsessions are secondary then to the hysterical ideas; and they must be cured by removal of the idea which causes them. The cases quoted clearly show this; *e. g.* A woman dared not enter a car alone for fear of fainting. It was not until one found the idea at the root of her fear that the latter could be removed.

Direct treatment of the physical or emotional results of a morbid idea, as by electricity, is bad practice; psychotherapy is the indication. The method of cure is illustrated by one of the author's cases of traumatic neurosis.

The labile suggestibility of children is very easy to manage when the physician or pedagogue understands the psychology of childhood. Only in studying this, will he be able to obviate reactions so injurious to mental health as false shame, imitative grimaces, undue impressionability of character. Finally, is considered the mechanism of the implicit suggestions which lead to *night terrors*, and an illustration of their prevention is related. The exclusive acceptance of unpleasant sexual affects in infancy as the cause of psychoneuroses is protested against, and from pediatricists and educators of abnormal children are asked further data to estimate their causal frequency, the author's experience being that affectogenetic

ideas of quite other sources appear to be efficacious in inducing fears and obsessions of childhood.—*Author's Abstract.*

THE PSYCHIC SIDE OF EXOPHTHALMIC GOITER receives merited consideration at the hands of Frederic H. Packard, M. D., Pathologist and Assistant Physician, McLean Hospital, Waverley, Mass., in a paper before the Amer. Medico-Psychological Ass., 1909. The 82 cases include 20 men and 62 women. 54 cases in which the heredity was stated, 63% showed a heredity for mental disease. In six cases there was also heredity for Graves' disease. In 26 cases, 32% of the total number, there were evidences of a neurotic or psychopathic make-up. 12 cases, 15% of the total number, had had psychoses previous to the onset of any objective symptoms of Graves' disease. Two had had more than one previous attack; in one case a psychosis had preceded the Graves' disease by two years, in one by eighteen years, in one by seventeen years, in two by five years, in one by four years, and in the remaining six the exact time was not given.

The age at onset of the Graves' disease varied from 18 to 63 years, the average being 33.9 years. Likewise the age at onset of the psychoses showed a wide variation, 18 to 66 years, the average being 35.8 years. That is, the psychosis came, on an average, about two years after the Graves' disease.

In 32 cases the onset of the Graves' disease and the psychosis was practically simultaneous. Among the remaining cases a one-year interval was noted in three, a two-year interval in five, a three-year interval in eight, a five-year interval in four, a six-year interval in one, an eight-year interval in two, and a ten-, eleven-, twelve-, thirteen- and twenty-year interval in one case each. That is, in 32 cases, or 52% where the interval was known, the onset of the Graves' disease and the psychosis was practically simultaneous, in the remaining 48% the curve of the intervals rises rather quickly to three years, and then falls again more slowly. A further analysis shows that 85% of the simultaneous cases had a bad heredity, as against 36% of the cases where the psychosis was later in onset, or from the opposite standpoint, only 15% of the simultaneous cases had a good heredity, while a good

heredity was found in 36% of the cases with a later onset of the psychosis. 50% of the simultaneous cases had a bad make-up, while only 26% of the cases with later onset of the psychosis had a bad make-up. Again, 19% of the simultaneous cases had had previous psychoses, while only 11% of the cases with later onset of the psychoses had had previous attacks.

Of the more striking symptoms shown in the psychoses of all cases, he found depression in 53 cases, 65%; excitement in 51 cases, 62%; delusions in 40 cases, 49%; apprehensiveness in 37 cases, 45%; irritability in 33 cases, 40%; exhilaration in 23 cases, 28%; hallucinations in 23 cases, 28%; incoherence in 13 cases, 16%; delirium in 11 cases, 13%; seizures in 8 cases, 10%; memory defect in 7 cases, 9%; paraphasia in 3 cases, 4%; phobia in 3 cases, 4%.

The entire monograph is instructive, observant and deductive, but we have not space for more.

NEUROPHYSIOLOGY.

SEQUELAE OF EXTIRPATION OF THE PITUITARY BODY.—By Dr. Aschner, (*39th Congress of German Surgical Society, Berlin, Klin. Woch.*, No. 14, 1910.)

The author proceeded to investigate his subject by performing the extirpation of the gland in a series of dogs. From these experiments it follows that the animals remain of small size, their genital organs do not undergo the normal development, and their sexual desire is retarded. All the signs of cachexia hypophysipriva are present. The pituitary body is not a vital organ, but it is necessary for the growth of the organism. From the therapeutic point of view, hypophyseal opotherapy is to be recommended in cases of dwarfism.

THYROIDECTOMY AND LESIONS OF THE LARYNGEAL RECURRENT NERVE. By Dr. Schloffer (*39th Congress of German Surgical Society, Berlin. Klin. Woch.*, No. 15, 1910).

In thirteen of 505 operations for goitre, the author noted disturbances on the part of the recurrent nerve, of variable severity, sometimes causing dysphagia. These phenomena

appeared not only during the manipulations in the vicinity of the nerve but also in the course of operative procedures at a distance, for example during the liberation of the goitre. Under all circumstances, ligation of the inferior thyroid artery is not devoid of danger for the laryngeal recurrent nerve and it is sometimes advisable to omit this procedure. Resection of the posterior capsule affords no protection against a lesion of this nerve.—*Dr. F. Robbin's Excerpt Post-Graduate.*

EXPERIMENTS IN PARTHENOGENESIS.—Some time ago Professor Delage, of the laboratory of Roscoff, reported that he had been able to obtain the parthenogenesis or artificial fecundation of sea-urchins' eggs. He succeeded in keeping alive for a certain time young sea-urchins obtained from eggs which had not been impregnated by the male. This curious phenomenon had been realized by two processes, in the first place by the chemical action of an acid, and in the second by the physical action of an electric current. At a recent meeting of the Paris Academy of Science, M. Bataillon, dean of the Dijon Faculty of Science, reported that he had been able to induce the appearance of a similar phenomenon by purely mechanical means. Taking frog's spawn, each egg was pricked by a platinum wire five-hundredths of a millimetre in diameter, whereupon it commenced to go through the ordinary processes of maturation, precisely as if impregnated naturally, and after the ordinary interval of time burst to give birth to perfectly formed tadpoles, two of which were still living at the time of writing. The author explains this result by the consideration of the phenomena which follow the entrance of the spermatozoon into the egg. In order to produce these, it is merely necessary to produce the first of them, whereupon the others will follow in their natural sequence. The prick of the platinum wire produces an effect analogous to that which follows the penetrating action of the sperm-cell. The author, however, takes care to make it clear that his explanation is merely hypothetical.—*The Hospital.*

NEUROTHERAPY.

DUCTLESS GLANDS AND DUCTLESS THERAPY.—With the physiologically tested preparations of the modern laboratory the imagery of such medication makes a profound contrast. This is particularly true in the case of the ductless glands. The progress of the past decade, during which time one gland after another has yielded its secret to the industry of the experimental biologists, is noteworthy. We can no longer agree with Magendie, who, in 1841, remarked: "I have nothing to say of the suprarenal capsules; what function has the thyroid gland?—nobody knows it!" Thyroid activity has been the subject of the most exhaustive study during this period. Kocher's designation of the complex of symptoms following complete removal of the gland as *cachexia strumipriva* found its analogue the same year in Semon's suggestion that the symptoms of myxedema were similar, and due to loss of thyroid secretion. The theory of Moebius, that the Basedow syndrome is an expression of hyperthyroidism, is now universally accepted, while the brilliant results of administering thyroid in cretinism are parts of the romance of medicine.

At first the absolute anatomic and physiologic independence of the thyroid and parathyroid was not recognized. The tetany that sometimes followed the removal of the thyroid *in toto* was supposed to be due to the loss of thyroid function, until the suggestion was made that its cause lay in the simultaneous removal of the parathyroids. Then the striking subsidence of symptoms following the administration of parathyroid glands in post-operative tetany was conclusive that these glands were the causative agent. Probably the most interesting phenomenon was the demonstration by Voegtlin and MacCallum of disturbed calcium metabolism in experimental tetany following parathyroidectomy, and the cure of such tetany by the administration of calcium salts. A few clinical reports have also been made showing the same effect of calcium.—*Abstracted from Interstate Medical Journal.*

"EHRICK'S 606 CURES LUES VENERIAE WHILE YOU WAIT, as it were" is what Steadman of the *Record* says of it.

The chemical name of "606", is in brief, dioxydiaminoarsenbenzol or *in extenso* diamethyl dioxyarsenobenzoldichlorhydrat. It belongs to the arsenical and has been worked up by Ehrlich and his laboratory assistant at the 105th and 106th experiment and is also called the Hata preparation.

The preparation, besides being a speech paralyser and procreative of stammering, is patented and will not get the imprimatur of the Council on Pharmacy or the code in America and the *Record* thinks Americans will have to do without the polysyllabic pharmaceutical product.

The following is what the *Record* says of "Fate of the Ehrlich-Hata Arsenical Preparation in the Body." The fate of any substance possessing physiological and therapeutic activity, after it has exerted its activity, is of paramount importance. An inert soluble substance should be eliminated unchanged in countries in which these elements are present in the soil and drinking water. In discussing the mode of action of the spirochete-annihilating arsenical preparation of Ehrlich and Hata, inquiry will naturally be made as to what becomes of the arsenic. The preparation is employed only in small quantities and it has been asserted that these quantities are promptly and satisfactorily eliminated. This statement is evidently, however, premature and based on insufficient observation. Alt (*Munchener medizinische Wochenschrift*, July 19) has already had two opportunities for autopsy on subjects treated with the new preparation and has learned from them as well as from clinical observation that the Ehrlich-Hata compound is eliminated much more slowly than its predecessors (atoxyl and others) when injected into the muscles. Atoxyl is eliminated promptly and almost completely by the urine, and this is also true of some of its congeners. On the contrary both the Ehrlich-Hata preparation and arsenophenylglycerin, which is used in combination with it, are not so promptly excreted by the kidneys, and may also be shown to persist for a number of days in the feces. The chief revelation of Alt's autopsies was that "606" remains unchanged for a long time at the site of injection, for he found that a considerable fraction of the medicament injected into the muscles had never been absorbed. There

was, however, no evidence of any storage of the substance in the tissues which would seem to support Ehrlich's assertion that it is not organotropic.

The word itself ought to be a good test for speech defect, for whoever can pronounce this ought to be able to pronounce anything and show lingua-labial power intact.

HODENPYL'S CANCER CURE.—Eugene Hodenpyl, pathologist to Roosevelt Hospital, made an announcement regarding cancer in the *Medical Record* of February 26, 1910, which seems to us of most momentous import. He had used the ascitic fluid from a recovered case of internal cancer in the treatment of forty-seven carcinomatous patients with most striking results. Injected *anywhere*, a selective action upon the cancer cells becomes rapidly manifest, the tumors subsiding and emaciation decreasing. These phenomena are attended by temporary local redness, tenderness and swelling in the region immediately adjacent to the tumors. The normal tissues of the body show no reaction and there are no systemic effects, even after large venous infusion. The tumor tissue becomes softened and necrotic and is either absorbed or discharged externally. Subsequently more or less connective tissue is formed in its place.

Many of the forty-seven cases were hopeless and inoperable at the beginning of treatment.

While he was devoting himself enthusiastically to this special work he was stricken with pneumonia and died May 5, after a short illness. He was for many years pathologist to the Roosevelt Hospital, a member of the American Association of Pathologists and Bacteriologists, of the New York Academy of Medicine, and of the New York Pathological Society, of which he was at one time president. Upon his retirement from academic work in 1909, he devoted his entire time to the pathological service of the Roosevelt Hospital.

The *Medical Record* says: "The suggestion which inevitably became public, that he had found a new way of treating cancer, brought to him a flood of urgent demands for help from all over the world, mostly from inoperable and hopeless cases. The great responsibility involved in a new

mode of treatment, the ceaseless pressure of pitiful appeal, and the unremitting physical and mental strain bore heavily upon him. But the possibilities of service to science and more directly to his suffering fellowmen, outweighed all personal considerations and led him to ignore the warnings of his professional friends. So at last he was able to offer but slight resistance to what seemed at first a relatively slight attack of pneumonia."—*Editorial in Southern California Practitioner.*

VALUE OF CARBOHYDRATE AS FOOD.—Until a few years ago a diet was valued on the basis of its calorificity and its content of protein, fat and carbohydrate. No one thought of assigning to carbohydrate any role other than that of being a source of heat and energy.

Recently, however, there has accumulated evidence sufficient to show unmistakably that carbohydrates do something more than supply energy and heat, and while at the present time this something cannot be defined clearly, some conclusions can be drawn. A few of these dictetical studies are so simple in their planning that a telling of them might be of interest. An individual maintaining equilibrium on a constant diet of fat and carbohydrate and a liberal quantity of protein when the carbohydrate is removed and the calorific value of the carbohydrate made up with fat shows an immediate increase in the breaking down of the tissues. It is evident that had the carbohydrate supplied only heat and energy, replacement by its equivalent of fat could not have led to an increased catabolism. Another experiment seems to be equally interesting. A man subsisting on a diet poor in protein and fat and rich in carbohydrate shows only a slight nitrogenous excretion, but when the carbohydrate of the dietary is replaced by its isodynamical equivalent of fat a pronounced rise in nitrogenous elimination and a rapid loss of weight take place.

While further experiments might be cited, the two just mentioned show clearly that a relationship must exist between protein metabolism and carbohydrate utilization, and while the time is not ripe for a precise statement of this relationship

it might not be out of place to refer to a conclusion which seems unavoidable—a conclusion which was hinted at many years ago both by clinical workers and by experimental physiologists—namely, that when the tissues break down some of the nitrogenous products may be re-utilized in the rebuilding of the cells—provided abundant carbohydrate is available.

Should this interpretation be upheld by future studies our conception of the dietetic value of carbohydrate will be broadened and the physiological diet will be represented by one of less protein and more carbohydrate. L. B. S.

WHICH PREPARATION OF THE PITUITARY IS THE BEST TO USE IN TETANY?—The removal of the pituitary in part causes even in man an enlargement of the thyroid. Extirpation of the thyroid causes an increase in the size of the pituitary. In a paper (*New York Medical Journal*, Dec. 10, 1908) we have shown in feline tetany that the pituitary gland given in distilled water subcutaneously had an effect at least equal to the calcium salts in alleviating the tetany after complete parathyroidectomy. As calcium has failed in several instances to cure tetany in man it is necessary to seek other agents to combat the disease.—*Isaac Ott, M. D., and John C. Scott, M. D., in Medical Bulletin*, February, 1910.

TOBACCO.—*The Post-Graduate* reprints the following from the *Jour. A. M. A.*

“In England, at least, it seems that the question ‘Do you use tobacco,’ must now be added to the anamnesis for women as well as for men. Angina pectoris has heretofore been comparatively rare among women; but Osler, in a recent lecture, presages an increasing number of cases of cardiac neuralgia and of a mild form of angina in women, commensurate with the rapid increase of cigarette smoking among them. In England, it seems, many women are becoming habituated to the use of tobacco in this form; and possibly also, this vogue is obtaining among us to a degree which we, as practitioners, shall have to take into serious account.

“Osler, for example, cites the case of an American woman

whom he saw in Italy, whose daily allowance of cigarettes was never under twenty-five. Every morning precordial pains made dressing difficult for her. His observation that very heavy smokers may die from vagus-inhibition, such as obtains in angina pectoris, may be noted also in passing. Three of his acquaintances, seemingly strong, healthy men, not known to have had heart disease, but all incessant smokers of strong cigars, died suddenly and without warning—one while smoking, another while sitting comfortably in his club, the third on the beach after bathing.

“Another word may here be interjected regarding angina pectoris in our profession. The proportion of our colleagues who suffer from this malady, the pain of which is so excruciating, and so dreadful to the beholder of these sufferings, is much greater than that in other professions. One reason for this is the profound nervous shock which physicians must feel when aroused after a couple of hours’ sleep—when sleep is deepest; undoubtedly, however, another reason lies in smoking, to which the profession is unusually prone. Comment has been made, flippantly, but not without truth, on the coolness with which the medical man will advise his patient against smoking, while several cigars appear most obtrusively from his vest pocket.”

HEXAMETHYLENAMIN, U. S. P., is a solid crystalline substance obtained from formaldehyd. It is very soluble in water and soluble in ten parts of alcohol. This drug was made official in the Pharmacopeia of 1900. It has been freely used as a bowel and genito-urinary antiseptic. It has been clinically positively demonstrated that it is valuable in acute infections of the gall-bladder, and efficient in preventing the development of and the propagation of typhoid bacilli and other bacilli there. It is possible with this drug enormously to render the gall-bladder more or less antiseptic.

Crowe (*Archives internationales de Pharmacodynamie et de Therapie*, 1908, xviii, 315) showed by experiments on dogs that hexamethylenamin was excreted not only by the liver ducts into the gall ducts, but also by the gall-bladder itself and also by the pancreas. After exposure of the duodenum

an opening was made about 3 cm. below the pylorus, and small catheters inserted into the orifices of the pancreatic and common bile ducts. The bile and pancreatic juice were collected after the intravenous injection of secretin. The experiments showed that hexamethylenamin is excreted in both the bile and pancreatic juice. Examination of the bile in the gall-bladder in experiments in which the cystic duct had previously been ligatured, showed that the substance is excreted directly by the gall-bladder as well as by the hepatic cells. The milk and saliva of these dogs also gave the test.

In view of the findings in animals it was determined to make a bacteriologic and chemical study of the bile obtained from patients with biliary fistula before and after giving hexamethylenamin. The number of colonies of organisms obtained from one loop of bile in all cases was rapidly reduced to zero. In one specimen before giving the drug, 150,000 colonies were obtained from one loop of the bile, while after giving the drug for a few days, the bile was absolutely sterile. The organisms found were chiefly typhi, coli and pyocyaneus. Typhoid germs are particularly susceptible to hexamethylenamin. The dose necessary to obtain the desired effect quickly in the gall-bladder was found to be 5 gm. (75 grains) a day. Usually one to two doses are sufficient to render the bile absolutely sterile.

This drug will act satisfactorily in preventing phosphaturia when all other drugs, diets and treatments have failed, and hence, can be used to prevent undesired alkalinity of the urine.—*Jour. A. M. A.*, vol. LV., No. 2, *Editorial*.

HIGH FREQUENCY CURRENTS IN THE TREATMENT OF ARTERIOSCLEROSIS.—The method Dr. Thomas E. Satterthwaite, of New York, recommends is as follows: The patient is first subjected for a few minutes to the light bath, by means of which the blood is brought to the surface, and a sedative effect produced. Then the static breeze may be given: The sliding poles are pulled apart, so that there will be no spark, and the negative side of the machine is connected with the insulated platform by the long brass shepherd's

crook, while the positive pole is grounded. The metal stand-ard being placed near, with the crown over the patient's head, the negative electricity streams over his face, so that he feels the breeze. There is also an odor of ozone, which fills the room, the oxygen of the air having been changed to ozone, or, in other words, electrified. This treatment, which is continued for from five to ten minutes, is very soothing and helpful in asthenia. The patient is then subjected to the high frequency current. The plant for this consists of a resonator combined with a d'Arsonval solenoid and adjustable spark gap and a pair of condensers of the Leyden jar type. This apparatus is operated by a static machine of sixteen plates. The patient reclines on a "condenser couch," which is insulated by means of glass feet. Its cushion has on its under surface a fine metal plate, which extends its entire length and is connected with one pole of the Oudin resonator. The other pole of the resonator is connected with a vacuum electrode, and the fluorescent spark discharge is applied through the clothing of the patient by the operator's slowly moving the electrode over the surface. The séance lasts from ten to fifteen minutes.

In the discussion Dr. P. Brynberg Porter said he had known the patient intimately, both before and during his illness. The man is now in remarkably good condition considering the nature of his trouble.—*Abstract from paper before June 18th meeting Amer. Ther. Soc., 1910, in Post-Graduate.*

PROSIT WATER, "OAK GROVE," FLINT, MICH.—Comparative analysis of the water from the flowing well on the grounds and that from a spring in Bath County, Va., made by Dr. J. E. Clark, of Detroit:

ONE UNITED STATES GALLON CONTAINS:		Bath Co.,
Oak Grove Well.		Va., Spring.
Grains.		Grains.
Sodium Chloride.	98.363	—
Potassium Chloride.	2.973	—
Magnesium Chloride.	1.253	0.342

Magnesium Sulphate.....	—————	3.534
Calcium Bi-Carbonate.....	14.053 (Carb.)	16.200
Calcium Sulphate.....	13.703	3.007
Magnesium B-Carbonate....	12.945 (Carb.)	3.059
Sodium Sulphate.....	—————	3.148
Alumina and Iron Oxides....	0.583 (Carb. Iron)	0.221
Silica.....	Trace.	0.103
Lithia Bi-Carbonate.....	Trace.	—————

Water from this well is bottled and sold under the name "Prosit."

The location of the Hospital affords many possibilities of pleasure as well as of health. The immense trees are the delight of patients and the glory of the grounds.

NEUROTOXICOLOGY.

COCAINISM.—Dr. T. D. Crothers says that there is no drug so fascinating in perfect relief of discomfort, fatigue, mental worriment, and sense of exhaustion, and the impression which follows from its use is that of renewed vigor and unusual capacity, also that some new force has been added, or capacity for reasoning and observing of matters relating to the body and its surroundings. After reviewing the conditions for which cocaine is given, the author remarks that the first after-effects following the withdrawal are of short duration, and not especially painful. Later this condition increases. The pain takes on a mental activity, a species of irritative melancholia and profound exhaustion which seeks relief at all times and under any circumstances. Nature seems to protest against the physical and psychic injury done in the most alarming way. This is seen in the facial agony of the cocaine taker when deprived of the drug. His sufferings are internal and not seen in muscular excitement. The profound change that follows its use in the quiet face, serene satisfaction, and perfect relief is evidence of its effects. There appears to be a more pronounced susceptibility to this drug than to alcohol or opium. Few cases are found in which the effects are unpleasant. Many persons become alarmed when they discover its tremendous fascinating effects. A great

many cocaine takers in this country are poisoned by spirits and drugs, and are exhausted before cocaine is taken, and the relief which this brings them is a new experience, increasing the degeneration. Cocaine addiction can be concealed for some time, hence its peculiar danger. Druggists, physicians, and the patent medicines are responsible for this new scourge of humanity. The remedy is to stop its sale, except for some specific purpose, to be noted on a public book, and where a doctor uses it freely, there must be some accounting, so as to prevent its danger. Drinks served from the soda fountain, containing cocaine, are attracting increased attention by the sudden popularity and enormous sale in certain sections.—*Abstract from Med. Rec.*

PSYCHOTHERAPY.

ORGANIZATION FOR ILL-HEALTH.—Under the caption, "The Organization for Ill-Health," *Science* thus correctly discourses. We abstract in part only:

"There are a number of commercial interests in this country that do not want an independent national Department of Health. In recent years we have had many exposures of the patent medicine swindle. We have learned that most of the most popular patent medicines, the so-called tonics, were nothing more than dilute alcohol with certain bitter drugs so as to make them taste medicinal. Physicians have seen alcohol habits formed as a consequence of freely imbibing these alcoholic preparations. Some of them were meant particularly for women's diseases, and the consequence has been a feminine nipping at alcoholic products that has worked serious harm to the women of the country. We have also found that the headache powders so commonly advertised were composed of drugs which, when taken as freely as was advised on the labels of many of these preparations, were seriously dangerous. We have had not a few, but many, deaths as a consequence of them. The soothing syrups for children mostly contained opium and were seriously injuring the growing child at an important period of its development,

and adding to the number of nervous wrecks with tendencies to drug addictions in after life that we had in this country.

For a time after these exposures the patent medicine swindlers were very quiet. In many cases their advertisements disappeared from their usual places. Now they are gaining courage again. The American people have proverbially a very short memory for such exposures. The patent medicine people dread very much the organization of a national Department of Health, because this will sadly interfere with their now happy prospect of reviving their business and fattening their purses at the cost of the health of our people. This is one element in the opposition organized for ill-health."

PSYCHIATRY.

"CAUSES OF INSANITY".—Commissioners of N. Y. state.

There is no more difficult question in medicine than that of determining the relative importance of antecedents to the onset of disease, and when the malady is that of the mind the complexity and variety of such antecedents make the subject very intricate to unravel. Many factors, some obscure and insidious, may co-operate in the derangement of the mental balance, and some of these it is not possible to express in terms of physical change, no more than it has yet been possible to demonstrate material alterations in the brain in every form of insanity. For after it may have been shown to demonstration that there is an inherited tendency to brain or nerve disturbance, or that there is proof of a recognized toxic agent operating on the organ of the mind and deranging its function, there must (and probably for long will) remain no small residuum of cases in which the lack of any satisfactory physical explanation of such derangement is manifest.

THERAPY.

AMERICAN SERUMS ABROAD.—*The Post-Graduate* calls deserved attention to the fact that the Rockefeller Institute of New York has been presented by the Pasteur Institute

of France with a replica in bronze of the bust of Louis Pasteur in recognition of aid rendered in the recent epidemic of cerebrospinal meningitis in France. It is reported there that the mortality was reduced from 80 per cent or more to about 15 per cent by the use of the serum furnished by the Rockefeller Institute. Professor Calmette, on his return to Lille from the International Congress on Tuberculosis, took with him some of the serum, and later large supplies were sent to him, Professor Vetter and Professor Roux, so that the Rockefeller serum is the basis for most of the reports which have appeared in the French journals.

ANOTHER YEAR

in the successful career of *The Alienist and Neurologist* closes with the present number and volume.

This magazine thanks its many loyal friends for generous contributory and pecuniary support and for the efficient aid in bringing to the fore the importance of Psychiatry and Neurology in professional attention and esteem, especially the significance and importance of Psychiatry, clinical and forensic, in the esteem of the medical and legal professions.

Thirty-one years will soon have passed since the importance of Psychology and Psychiatry were proclaimed in our pages and the prediction that Psychiatry and Neurology and Neuriatry were destined to "reign paramount in medical thought." The day of triumphant verification of the prediction is now close at hand, and in fact is here, though the Carnegie Foundation has as yet ignored this important subject as one demanding pecuniary and teaching promotion.

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Any Comment, favorable or unfavorable, specifically set forth, is always welcome from friend or enemy or any "mouth of wisest censure."

CHAS. H. HUGHES, M. D., Editor and Publisher.

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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

COMMUNICATION WITH THE INSANE.—So many requests have been received for the May number with the article on "Letters to the Insane" that we add the following:

This question of submitting letters and other messages, by telephone, telegram or person from friends to patients or even of giving presents from home is one of the most important problems of clinical psychiatry, making the burden of epistolary judgment harder on an insane hospital superintendent than the duties of a state governor.

The ophthalmologist or surgeon does not add irritation to an inflamed eye or sprained or broken joint—he gives

them rest. The surgeon does not rudely tear open a wound nor can a psychic wound be often repeated with best chance for its healing.

Messages from the fountain source of insanity's inception are best turned back before they strike and wound the patient in his delusioned brain centers.

There are times and opportunities, after psychic convalescence is once completely established, when messages from home may be healing to the mind diseased, but only an alienist of experience can decide wisely upon these. I have seen an inopportune visit insisted upon and a premature removal against medical advice cause mental relapse. If in doubt as to whether a message or a visit will re-awaken dormant or fading delusion we should forbid them.

If the patient is convalescing we should be cautious and make no sign of congratulation that might contain reference to the fading delusion. It might stir up a smouldering fire of abnormal brain retrospection. Be cautious and sure on this subject. Let neither object nor suggestion awaken the slumbering morbid idea. Neither reasoning nor suggestion as a rule will dissipate insane delusion. These methods are for the sanely deluded and even these can not easily be reasoned out of illogical fads and fancies as they appear in much of our erratic social life among those who call themselves sane. Many of the delusions of the sane originate in the overwrought brains of psychasthenic paranoiacs to be taken up by other, but less gravely affected neurasthenics, as cults of religion and fads of society. Psychic amblyopias lead not only the similarly blind, but others not naturally so obscure of mental vision, and they all fall into the ditch of morbid and illogical delusion together.

UNFAIR TRIAL AND CONVICTION OF A PHYSICIAN.—Dr. Hyde charged with the murder of Colonel Swope by poisoning at Kansas City was confronted in court before the jury with a nurse girl's story that he killed another man—an apoplectic, by bleeding. Now apoplexy is itself a bleeding into the brain, course or microscopic (or serum extravasation) and usually unto death. This old treatment, in vogue before substitutive

medication was known, for contracting the arteries and arterioles in the brain, was used to direct the blood flow therefrom and contract the vessels there and phlebotomy was then often successful.

But why should the court let in such non-medical and irrelevant testimony of a case not before it which could show no more than a possible error of judgment, in a matter not germane, because not included in the indictment. The assertion of a nurse that a doctor had bled an apoplectic to death who might probably have died despite the bleeding, proves nothing.

In this remarkable case a charge of poisoning by causing typhoid fever, then by strychnine and finally by hydrocyanic acid poisoning was made, the latter sustained by the jury, though the victim was past eighty-two years old, had a suprarenal tumor, almost complete aortic sclerosis, one convulsion followed by coma and was all day dying, while death from hydrocyanic poisoning is always almost instantaneous and never lasting over one hour and a half, even in the young with greatest vital resistance to toxhemic conditions.

BABY'S LIFE BEGINS AT BIRTH, SAYS COURT.—Demurrer that infant wasn't "person" when car hurt mother sustained. A suit, said to be the first of its kind tried in the United States, hinging upon whether life legally attaches to a child before or after birth, was decided by Circuit Judge Williams in St. Louis. Judge Williams held that life legally commences at birth.

In sustaining a demurrer of the United Railways Company to the suit of Cornelius H. Buel and his wife, Mary, of No. 4026 Scanlon Place, for damages for the death of their 4-months old son, Dennis, who, it was claimed, died as the result of an accident to his mother before he was born. Judge Williams based his ruling upon a part of the Scriptures. He quoted Genesis, ii, 7: "The Lord God formed man of dust of the ground, and breathed into his nostrils the breath of life, and man became a living soul."

The demurrer averred that the child, in the meaning of

the law, was not a "person" at the time Mrs. Buel was injured.

"Life," said the court, "comes with the breath, and breath comes with the birth. The personality of a human does not attach until its birth, and solicitude for its welfare is aroused by its first piercing wail."

Mrs. Buel was injured in getting off a car at Spring Avenue and Natural Bridge road September 22, 1907. The child was born February 29, 1908, and died July 5, following.

The foetus or child unborn while yet in the mother's womb is then a part of the mother, an ante-natal possession, an attachment and the property of her person and certainly damage should be recoverable quite as much so as though the accident had ruptured a bowel or a viscus.

The first pair may have started life that way, but the "breathing on from without" business has been abandoned as a starter of life. Life now begins with conception and is established with the first foetal movement. Viability is thus known to doctors, so to speak, and to mothers by the first kick.

AN AMERICAN UNIVERSITY OF MEDICINE should be established and fostered by the medical profession. It should have besides the dental department of oral medicine and surgery and the chair of ophthalmology, a thorough course in optometry for the general physician.

A department of physics pertaining to the physiology and pathology of man's sanitary needs and disease prevention.

Departments of psychiatry, psychotherapy and hydrotherapy, all there is of suggestive therapy and osteopathy.

The sects should be shown where they belong as limited phases of regular medicine, by teaching all there is in them in connection with regular medicine.

All there is distinctive in homeopathy should be taught explicitly in a regular medicine course, not as now, but incidentally. The people would know that the regular profession is not ignorant of the *similia similibus curantur* cult which the regulars inherited along with *contraria contrarii curantur morbi* from their ancient Father Hippocrates, long,

long before Hahneman was born, and sought to make this limited theory, with the infinitesimal therapy added, the sole foundation of medical treatment.

A SEPARATE ASYLUM FOR CRIMINAL INSANE.—Appeal of Dr. C. H. Hughes, Nov. 27, 1871, while superintendent of the Missouri State Lunatic Asylum—now State Hospital Number I—to the Board of Managers. This appeal is now repeated for every state in the American Union.

It is a crime to mix the normally innocent with the criminally habited, even though both be insane.

“Provision should be made by the state at once, for the care of its insane convicts, inside or contiguous to the walls of the penitentiary, and connected therewith, as in Auburn, New York.

“It has been justly remarked by another superintendent, ‘to cast into the same house of refuge with the homeless, feeble, kind hearted and truthful victims of ordinary insanity, these moral monsters, is an outrage against public benevolence and an indignity to human affliction.’ ”

THE PSYCHOLOGICAL LABORATORY AND CLINIC OF OLD PENN.—An important work undertaken by Old Penn, the organ of the University of Pennsylvania, is for the study and relief of a large class of children in this country who are mentally or morally deficient, or suffer from some physical defect which renders them slow of development or prevents normal progress in school.

This is a good example. This large social problem connected with the progressive development of the American people taken up by this time honored school will be hailed by all patriotic humanitarians and friends of Old Penn as one of the best of its many efforts for the mental and physical welfare of the children of this country.

We wish the Psychological Laboratory and Clinic the success the old school ought to bring to it and the prosperity the subject so richly merits.

We recommend to the Carnegie foundation more psychiatry and less detail laboratory technique for medical students; also optometry in the ophthalmologic course, if the few hours to teach and learn it have to be taken from laboratory detail. Laboratory results are what medical art needs more than laboratory practice except in microscopy and animal and analytical chemistry.

A LABORATORY PARAGRAPH FOR THE DEMOCRAT PLATFORM.—Dr. Arthur MacDonald asked that the following paragraph be incorporated in the last National Democratic platform, but the Democratic party did not approve of it and it was not adopted. It would have been equally appropriate in the Republican platform. Either party, as politics now go, would furnish ample clinical material for patriotic as well as psychologic study.

"PREVENTION OF CRIME."

"Whereas crime has been increasing, especially among the young, and this in the midst of great advances in civilization and whereas for a number of years numerous learned societies in medicine, law, science and religion, representing more than 100,000 leading professional men from all parts of our country, have been recommending to Congress scientific and professional study of crime with a view to lessening or preventing it, we therefore favor legislation to establish laboratories under Federal, State and City control for the thorough investigation of the causes of crime, which is the greatest, most constant and most costly enemy of all forms of government.

"Since crime thus involves the whole country to an enormous extent, and also costs more than one-half of the government's total expenses, it is an important matter for a platform. We have become so accustomed to hearing of crime as to be unconscious of its real extent and enormity, and when realizing it to erroneously assume its increase unavoidable. The scope of the paragraph includes all methods of reform and in addition seeks through knowledge gained by scientific study, to protect the young in advance before they have gone wrong, and not after they have fallen and

become tainted, which is the great defect of all schemes of reform."

THE AMERICAN ACADEMY OF MEDICINE under the able presidency of Dr. James H. McBride, of Pasadena, Calif., held its entertaining and instructive meeting at St. Louis, June 4-6 preceding the A. M. A. assembly here. The motto of this useful and essential society is "Prodesse Civibus" and it fulfills the spirit of the motto in its proceedings. Among the subjects pertaining to the public welfare were:

The Report of the Committee to investigate the Teaching of Hygiene, Report of the Committee to Investigate the Effects of Alcohol on Moderate Drinkers and the Report of the Committee on the Essential Subjects to be Taught in a Medical School, The Educational Principles Involved in the Combined Course in Arts and Medicine, The Correlation of School Health Supervision with Other Health Agencies, The School System and the Child, the President's Address on the Individual and the Social Organization, The Physician's Share, and a conference on "Our Obligations as Medico-Sociologists to the Orient."

THE YOUNG SUICIDE IS A RACIAL BENEFACTOR if, by reason of hereditary unstable mental condition, he kills himself for slight cause and have no issue, for thereby he averts the tendency of suicidal calamity from posterity.

In this connection suggestion of asexualization comes to the *Alienist and Neurologist* and reports like those of Dr. Martin W. Barr and other superintendents of institutions for the idiotic, and surgically suggestive and remedial contributions like those of Ewing in the *Boston Medical and Surgical Journal* and *Medical Record*.

Weir and others have done good work in preventing the transmission of psychopathy. The vesectomists should proceed as they would with neurectomy, *i. e.* cut out enough to assure against reunion and thus avert the possible regaining of the propagating power. Do this and then, if you will, stay the hand of the suicide, for his life will not then be likely to harm posterity.

DR. BYRON ROBINSON'S SPLENDID BEQUEST to promote study of the Sympathetic System, etc.

The Alienist and Neurologist heartily joins with *Science* in commending these provisions in the last will and testament of our lately deceased worthy and eminent medical friend. By this bequest Dr. Robinson, a graduate of the University of Wisconsin in the class of '78, who died last March, the university receives a large collection of books and pamphlets on anatomy, supplementing the gift of over a thousand volumes on the history of medicine made by Dr. Robinson shortly before his death. The collection is to be known as the Robinson-Waite Library, in honor of the donor and his wife, Dr. Lucy Waite. The whole amounts to over 1,500 volumes and is valued at over \$4,000. Dr. Robinson's library is unusually rich in early American medical treatises and old anatomical plates, including many fine copperplates. Funds for the establishment of a scholarship in anatomy in the university medical school, valued at \$550 a year, are also provided in the bequest. This will be known as the Byron Robinson scholarship in anatomy, and is to be held by men or women students in medicine. The purpose of this scholarship is to encourage the anatomical, physiological and pathological study of the sympathetic nervous system.

"OPIUM AND ALCOHOL FIENDS" MISNOMERS.—"Opium fiend" is a term that should seldom, if ever, be applied to the ordinary opium user. It is a misnomer and an undeserved opprobrium to most of these unfortunate drug slaves. The majority of the opium habit enthralled become the enchained victims of this pernicious perilous habit undesignedly through use of patent or proprietary medicine self-prescribed, often for some distress or pain or from unwise counter prescriptions of some indifferent druggist and sometimes from injudicious prescribing of voluntarily renewable physician's prescriptions which are continuously refilled or passed to others, who refill them in ignorance of the long and continuous use of this wonderful medicine, so useful and yet so harmful to the human system, making slaves, as alcohol en-

slaves the unwary and often innocent who take it too long and too much without thought of consequences.

We should have only pity for the most of opium's unfortunate victims and for a large proportion of the victims of alcoholism, who as a rule, become unintentionally enslaved to the thralldom of these and other narcotics. Alcohol is rather a sedative than stimulant in its secondary effect. It deceives as a stimulant. Before they are aware of the fact, they become enchained and can not break their chains.

It is known to all neurologists and alienists and all mankind ought to know that many of these confirmed habitues to narcotics have inherent nerve instability, an intense unnatural intolerance of pain and fall easily into the habit. They come into the world, many of them, with an inborn instability of nerve element and are readily habituated to drug control and narcotic influence, which in its turn brings out into prominent activity many peculiarities of character and conduct that otherwise might have remained dormant for life. These are they who, when under influence of moderate quantities of alcohol for instance, show marked drunkenness, and this inborn instability of brain explains why some persons, under social drinking, are so soon alcoholically delirious and erratic while others appear not to show more than a normal exhilaration or stupor.

It is the greatest of perils for those of the neuropathic or nerve disorder constitutional tendency to take opium, alcohol or other narcotic, except under restrictive medical advice and never on their own judgment as to repetition of such drugs. They are not fiends but unfortunately they are generally dowered with a dangerous heritage of nervous instability which may soon place them beyond self-control concerning opium and similar medicines.

The utmost circumspection and caution should prevail in the prescribing and use of the entire narcotic class of remedies of which these are chief. This is an old story to the alienist and neurologist, but it needs oft repetition to general practitioner and patient.

Harper's Magazine for July, 1910, is an article by a well-known surgeon of Philadelphia, entitled "The New Surgery." Briefly, yet clearly and without technicalities, he outlines the newer operations and the reasons for their performance. Such articles as this supply the same information, although to a different audience, as do the public lectures, such for example, as have been given on Saturday evenings and Sunday afternoons at the Harvard Medical School and elsewhere. As a result of these, and of the reports concerning milk inspections, pure food legislation, the fight against tuberculosis, and other matters of public health, the people are gathering, first and last, a considerable store of hygienic and medical knowledge. Mysticism in medicine is fast losing ground, the people want to be "shown."—*Boston Med. and Surg. Journal*.

And when the people are shown about the sanitation of children, school houses, public assembly rooms and passenger travel conveniences and the means of averting neuropathy and psychopathy we shall have a better sanitary showing than now.

THE CHIEF BENEFIT OF THE CARNEGIE FOUNDATION TO MEDICAL COLLEGES as at present employed and as related to medical teaching should be, not to destroy all the smaller medical schools, many of which are doing good practical work, but to provide means for higher and more extensive technical laboratory work for those who may wish to become specially expert in these lines of research on the medical side, and to advance and perfect the teaching of the sciences allied to medicine, so that they can be appreciated and utilized in the art applied in practice.

Another benefit would be provision for the study of practical clinical psychiatry by the endowment of psychiatric chairs and hospitals as appurtenances of clinical medical teaching and optometry as Conner advises.

A PHYSICIAN IN THE CABINET.—A Retrospect.—"Had we thus looked to our interests the President's Cabinet would long since have been represented by one member of the pro-

fession, as the law, agriculture, finance, etc., are. We should have had the Medical Minister of Public Health, for which the American Medical Association is just now pleading, much to the profit of the people in the saving of the public health and of innumerable lives and to the honor of the profession, which, above all other callings, has been the friend and benefactor of mankind, giving to humanity its greatest blessing health," etc.

(Extract from Editor's Presidential address Miss. Val. Med. Ass., Oct. 16th, 1891. Subject, Work of Medicine for the Weal of the World.)

LET THEM HAVE LIGHT.—With the Saturday evening and Sunday afternoon medical lectures to the public, the commendation of this endeavor by President Burrell of the A. M. A., the efforts to popularize tuberculosis and other disease knowledge and precautions, the day of the quack popular medical advisor and the crippled false fad cults wane and the dawn of public medical enlightenment appears.

The profession suffers from public ignorance of medical knowledge and resource and from the consequences of fads and fictions and of ignorance on medical matters. We must enlighten them on all proper occasions and save ourselves and them as our code enjoins.

Dignified disgust and silence do not dissipate popular error nor medical healing fads of the day, nor exterminate the pestilent microbes and bacilli or erroneous and pestilential suggestion and practice of the ignorant little learned, who dabble in matters medical like the Christian Scientist blasphemers who are among us falsely claiming to be Christ commissioned, to heal the sick, on a financial basis, at so much a suggestion.

PREPARETIC PARESIS.—C. L. Dana, (*Journal of the American Medical Association*, May 14,) referring to a former recent paper in which he had expressed similar views, reiterates his belief that certain cases of paresis may yield to specific treatment if thoroughly used in the earliest stages.

In the early eighties the editor of this magazine thought

he had cured a case of this kind and so reported, but the patient was not allowed by his wife, who said she understood her husband well enough to know he was well, to remain longer under treatment. He relapsed and died insane in a Kansas asylum. The patient with the most exalted delusions and intense insomnia allowed himself to be treated for hemorrhoids. Taking advantage of this fact we applied our therapy to the other extremity, the hepato-intestinal area and specifically to the blood and nerve centers, with resulting suppression of delusion, and parietic phenomena of lips, tongue and motion.

Early paresis is sometimes manageable by a well-adapted psycho-physical therapy, even though the grave terminal pathological states so fully portrayed in Smith Ely Jelliffe's recent clinical contribution finally come on and end the life of the patient, despite our best and transiently successful therapeutic endeavors.

EPILEPTIC DEMENTIA.—Can anything be done to delay or ward off this most distressing end? Science, speaking through the psychologist, answers yes. If you will give us the means we will make the great majority of these victims—oftentimes the offspring of hereditary wrongs—partially, if not wholly, self-supporting, happy and capable of service to others.

Then it gives from a recent report of the medical staff of the Chalfont St. Peter's Colony for Epileptics, the following extract:

“Out of 150 cases in which epilepsy began about the usual period of puberty and which were under constant observation for periods varying from two to ten years, the following percentages were obtained as showing the ultimate issue of the disease:

- (a) Discharged with fits arrested, 4 cases, or 2.7 per cent.
- (b) Retention of normal mental condition, 8 cases or 5.3 per cent.
- (c) Showing some degree of mental impairment requiring care in an epileptic colony, 116 cases, or 77.3 per cent.
- (d) Ending in delusional insanity or other permanent states requiring asylum care, 20 or 13.3 per cent.

(e) Died as a result of a fit or status epilepticus, 2 cases, or 1.3 per cent.

HARVEY SOCIETY PUBLIC LECTURES.—Following program is the next series of lectures before the Harvey Society.

Oct. 15, 1910: Prof. Dr. H. Chiari, of Strassburg, Germany, on "Die Bedeutung der pathologischen Autopsie und sonstiger pathologisch-anatomischen Untersuchungen."

Nov. 12, 1910: Prof. W. E. Castle, of Harvard University, on "Unit Characters in Heredity."

Dec. 10, 1910: Prof. Harvey Cushing, of Johns Hopkins University, on "Certain Clinical Aspects of Dyspituitarism."

Jan. 14, 1911: Prof. Arthur R. Cushny, of the University of London. (Subject to be announced later.)

Feb. 4, 1911: Dr. Thomas B. Osborne, of the Connecticut Agricultural Experiment Station, New Haven, on "The Chemistry of the Proteins."

Feb. 25, 1911: Prof. Jacques Loeb, of the Rockefeller Institute for Medical Research. (Subject to be announced later.)

March 18, 1911: Prof. H. Gideon Wells, of the University of Chicago.

These lectures are given on Saturday evenings at the New York Academy of Medicine to any one who may choose to attend—medical or non-medical.

These and the Harvard public medical lectures will contribute to spread enlightenment among the people antidotal to mysticism and quackery and popular misleading pseudo-science cults and false healing fads.

PARK SPRINGS SANITARIUM.—As the season approaches when the physician seeks to know of the better institutions of the South for his nervous and psychasthenic patients, we take pleasure in naming one of the best in that region, from personal observation and familiarity with its appointment, its capable physician-in-chief and its salubrious springs. Because of its springs it has been called the Carlsbad of America. The altitude and accessible location, the skill and experience of Dr. Martin, the superintendent, late physician-

in-chief of one of Missouri's best hospitals for the insane, its accessibility to the south and southwest and central states, environment, quietude, climate and service all commend it.

FORESHADOWING PSYCHIC PRECURSORIES OF PARANOIA are some of the recent and lately passed egoistic speeches of the Kaiser of the Germans. His intensely self-centered, egoistic autocratic expressions and attitudes at times suggest the impending of this psychopathic calamity.

But it must be remembered that he is an hereditary Hohenzollern and born to autocracy, even theocratic autocracy, of a family of rulers who have ever felt that the "everlasting arms" were under them and that they enjoyed the perpetual favor of that "Divinity that doth hedge about a king" as aforetime has been said and believed.

We have to consider in psychologically estimating his Majesty that he is ruler of a people whose motto is "Gott mit uns." Our alienistic colleagues who may think the Kaiser a paranoid passing on to paranoia may be mistaken in their pessimistic estimate. But we shall see. It were wiser had some other than the Kaiser made his recent, much criticized speech at the banquet.

THE NON-INSANE EPILEPTIC.—The *Denver Medical Times* (and *Utah Medical Journal*), has taken up the cause of non-insane epileptics—see Jan., 1909, number. It advocates colony segregation from the insane.

As a child the epileptic is not educated. As a young man he fails to obtain employment, or obtaining it with difficulty, keeps it only on sufferance. As the years advance he retires to the county infirmary or to the asylum.

STERILIZATION OF HABITUAL CRIMINALS.—Santos Fernandez and F. M. Fernandez call attention to the advantages that this method would bring to all civilized countries. They are in favor of the method recommended by Dr. Sharp in 1899. The authors review the subject and mention the several methods recommended by Sharp, Carrington and Belfield. They conclude by urging the Cuban Government to try the

method in its penal institution.—*Cronica Medico-Quirurgica de la Habana.*

IN KANSAS CITY if a man does not dress in the prevailing style but prefers sanitary sandals, bare legs and a Greek toga virilis in hot weather, the police arrest him.

The Indian and his blanket and the Indian cigar signs are not to be safe in Kansas City. Body ventilation is at a discount there.

The psychology of the average city policeman, in K. C. especially, in connection with a citizen's personal rights under the constitution of this free country, is a study for the alienist and neurologist.

IN ESTIMATING POSSIBLE DELUSION account must be taken of non-delusional and peripheral impression paresthesia, anæsthesias and hyperæsthesias. These are not necessarily of psychic origin, but may be located in the states of the peripheral nervous system, mechanical or toxic, or in brain centers below the psychic cortex.—*Abstract from paper by Editor.*

HOOKWORM NEURASTHENIA.—Nervous debility assumes a new phase in the south, where bare feet and the hookworm go about. Hookworm neurasthenia there displays itself from bacillus toxæmia and is characterized by extreme indisposition to exertion without the usual phobias of true neurasthenia with this psychopathic accompaniment.

Hookworm neurasthenia has not the ordinary brain-strain cause of the neurasthenia of Van Deusen and Beard. The fly and the mosquito have been accused of causative responsibility in the premises also.

DOCTORS, REGULAR AND IRREGULAR.—The following poetic wit is from *Lippincott's*:

“HOMEOPATHS AND ALLOPATHS.”

If on doctors you should be a caller,
You will find there's not much in a name;
Though the dose of the one is much smaller.
The size of their bills is the same.

Lippincott's, however, makes the same mistake in reference to the regular profession of medicine that Flexner has in his attack on non-literary university annexed medical colleges, a mistake common to laymen, though Hippocrates, the Father of the Regulars, admitted both the principles of "*similia similibus*" and "*contraria contrarii curantur morbi*" in the cure of disease. Some diseases are cured by similars and some by contraries, said the ancient founder of the practice of medicine. Allopathist is an epithet offered to designate the regular practice in vogue in his day, by Hahnmann, the founder of Homeopathy, which teaches that only medicines like the diseases in their action cure disease and the more infinitesimal the dose the greater the effect.

"GOOD CITIZENS WE MUST HAVE some way or other", says *Success* and to this end it proposes "reasonable income, good schools, good drainage, light and air and an old age pension." But we must have more—we must have the right sort of material made into good citizens—patriotic, fair play minded citizens possessed of brains without the rot of inherited vice and degeneracy.

One of the remedies is in inhibition of entrance of certain creatures at Castle Garden and other parts of the U. S. Another is in legalized remedial surgery against conjugal, immoral, brutal mental defectives.

Let the criminal decadent defectives, dangerous to the Republic's life, who live but to propagate neuropathy and psychopathy in the world and die, be asexualized and the future saved from their otherwise baneful progeny.

SURGERY AND PSYCHO NEUROTHERAPY.—Surgeons, as Maurice de Fleury says of neurologists, should be physicians. They should be physio and psycho-therapeutists as well, when morbid mental states appear in their patients. Patients should be thoroughly treated all over—in mind as well as body, and the entire nervous system as well as in other systems, allowing neither exhaustion nor ptomaines nor autotoxines to get in their vicious brain disordering work.

This sort of all round knowledge applied in practice would avert many neuro-psychic calamities to patients not always prevented. Neuriatry and psychiatry are essential to the good physician or surgeon; little less so than hematology, myology, osteology, ductless gland, serum therapy, etc.

The number of surgeons regularly reading the *Alienist and Neurologist* shows growing appreciation in this direction.

A MOVING PICTURE SHOW exhibits a lot of strikers exhorting to violence and shows the striking mob entering the home of the manufacturer, destroying his furniture and fighting the proprietor and family until the president of the firm yields to their violent demands.

These violators of human rights, even the rights of the homestead, are men, but they are not Americans, who applaud this sort of unlawful coercion. There are times when labors' grievances are just and its feelings should be respected and rights conceded, but the psychic suggestion of scenes like this is bad, tending to familiarity with unlawfulness and the disregard of law and order and other men's rights, even the right of men of capital who employ their means to keep men in work.

A NOVEL FORM OF RELIEF INSURANCE.—The Automobile Owner's Relief Association makes us the following proposition:

"Our association gives service for one year for the sum of ten dollars and during such period agrees to tow in or return, your automobile from any point within a radius of twenty-five miles from the City Hall to any point within the same limits, when said machine shall be broken down to such an extent as to necessitate such service."

This would be a good form of relief assurance for a goodly number of our strenuous business men whose nervous systems need looking after in the same way, especially those who take their business relaxation in joy riding and speed craze spins.

The chief trouble with the average American business man is that he treats himself worse than he does his automobile and breaks his brain beyond hope of rebuilding before he leaves it on the road and sends for the relief man. The

undertaker generally takes his worn out and broken-brain machine to the cemetery of the coin-craving overstrenuous, or the ambulance carries him to the normal home of the abnormally strenuous—the lunatic asylum—often.

FACTORS IN NEUROTHERAPY.—The treatment of nervous diseases is usually considered to be the cultivation of a barren acre. Even specialists in neurology have been accused, no doubt with some justice, of devoting less time to the therapy of the diseases that they encounter than to the diagnosis. The adequate treatment of the majority of nervous diseases is not encompassed by the administration of medicines, regulation of the diet, or even by conforming to the laws of Hygeia; hence it is that so many of them are inadequately treated. It is not the fault of the practitioner. He has neither facilities nor equipment for carrying out the treatment that is appropriate and adequate; therefore these patients become recruits for the Eddyite, the Emmanuelite and the quack, or the habitués of the “cures” and commercial sanatoriums of Europe.—*By Joseph Collins, M. D., of New York, Physician to the Neurological Institute, in Interstate Medical Journal.*

MEN HAVE BEEN SHOT for calling a doctor “Dock,” but everybody calls the new dean of the medical department “Dock” and he doesn’t resent it. They call him Doctor Dock by way of concession and compromise and they say he is not averse to the salutation.

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

PSYCHOLOGY OF SEX: Vol. VI. Sex in Society. By Havelock Ellis, Philadelphia. F. A. Davis Co., 1910.

This is the concluding volume of Ellis' great psychology of Sex. Concerning the work's reception Ellis remarks in his conclusion:

"It is more than thirty years ago since the first resolve to write the work now here concluded began to shape itself, still dimly though insistently; the period of study and preparation occupied over fifteen years, ending with the publication of *Man and Woman*, put forward as a prolegomenon to the main work which, in the writing and publication, has occupied the fifteen subsequent years.

"It was, perhaps, fortunate for my peace that I failed at the outset to foresee all the perils that beset my path. I knew indeed that those who investigate severely and intimately any subject which men are accustomed to pass by on the other side lay themselves open to misunderstanding and even obloquy. But I supposed that a secluded student who approached vital social problems with precaution, making no direct appeal to the general public, but only to the public's teachers, and who wrapped up the results of his inquiries in technically written volumes open to few, I supposed that such a student was at all events secure from any gross forms of attack on the part of the police or the government under whose protection he imagined that he lived. That proved to be a mistake. When only one volume of these studies had been written and published in England, a prosecution, instigated by the government, put an end to the sale of that volume in England, and led me to resolve that the subsequent volumes should not be published in my own country. I do not complain. I am grateful for the early and generous

sympathy with which my work was received in Germany and the United States, and I recognize that it has had a wider circulation, both in English and the other chief languages of the world, than would have been possible by the modest method of issue which the government of my own country induced me to abandon. Nor has the effort to crush my work resulted in any change in that work by so much as a single word. With help, or without it, I have followed my own path to the end.

"It sometimes seems, indeed, a hopeless task to move the pressure of inert prejudices which are at no point so obstinate as this of sex. It may help to restore the serenity of our optimism if we would more clearly realize that in a very few generations all these prejudices will have perished and be forgotten. He who follows in the steps of Nature after a law that was not made by man, and is above and beyond man, has time as well as eternity on his side, and can afford to be both patient and fearless. Men die, but the ideas they seek to kill live. Our books may be thrown to the flames, but in the next generation those flames become human souls. The transformation is effected by the doctor in his consulting room, by the teacher in the school, the preacher in the pulpit, the journalist in the press. It is a transformation that is going on, slowly but surely, around us.

"I am well aware that many will not feel able to accept the estimate of the sexual situation as here set forth, more especially in the final volume. Some will consider that estimate too conservative, others too revolutionary. For there are always some who passionately seek to hold fast to the past; there are always others who passionately seek to snatch at what they imagine to be the future. But the wise man, standing midway between both parties and sympathizing with each, knows that we are ever in the stage of transition. The present is in every age merely the shifting point at which past and future meet, and we can have no quarrel with either. There can be no world without traditions; neither can there be any life without movement. As Heracleitus knew at the outset of modern philosophy, we cannot bathe twice in the same stream, though, as we know to-day,

the stream still flows in an unending circle. There is never a moment when the new dawn is not breaking over the earth, and never a moment when the sunset ceases to die. It is well to greet serenely even the first glimmer of the dawn when we see it, not hastening towards it with undue speed, nor leaving the sunset without gratitude for the dying light that once was dawn.

"In the moral world we are ourselves the light-bearers, and the cosmic process is in us made flesh. For a brief space it is granted to us, if we will, to enlighten the darkness that surrounds our path. As in the ancient torch-race, which seemed to Lucretius to be the symbol of all life, we press forward torch in hand along the course. Soon from behind comes the runner who will outpace us. All our skill lies in giving into his hand the living torch, bright and unflickering, as we ourselves disappear in the darkness."

The present volume discusses the following topics: The Mother and Child, Sexual Education, Sexual Education and Nakedness; Valuation of Sexual Love, Function of Chastity, Sexual Abstinence, Prostitution, Conquest of the Venereal Diseases, Sexual Morality, Marriage, Art of Love, Science of Procreation. The social aspects of sex are therefore well covered. In discussion of the effects of sexual abstinence the problem in those in whom the appetite has not been awakened does not seem to be clearly separated from that in those in whom the appetite has been spontaneously awakened and, under nerve rhythmic law, recurs easily. The physical effects of emissions produced by local states are the same as those produced by coitus or masturbation and hence have the evil effects of excess all the more trying as the source is not recognized. The sexual explosions of like nature in women are frequent and underlie much so-called hysteria of the poseur type. The book is well issued.

DIE FUNKTIONEN DER NERVENCENTRA PROF. DR. W. VON BECHTEREW. DEUTSCHE AUSGABE, IN VERBINDUNG MIT DEM VERFASSER REDIGIERT DURCH DR. RICHARD WEINBERG. ZWEITES HEFT: KLEINHIRN, MITTELHIRN, ZWISCHENHIRN UND SUBCORTIKALE GANGLIEN, MIT 141

ABBILDUNGEN IN TEXT. VERLAG VON GUSTAV FISCHER
IN JENA, 1909.

This second volume on the function of nerve centers contains 641 pages, and considers the cerebellum, mid-brain, thalam-encephalon or twist-brain and sub-cortical ganglia. After considering the well-known relations of the tactile and muscle sense impressions, and the semi-circular canals to the cerebellum, he takes up the action of the grey matter about the third ventricle. He states that lesions of the central grey substance of the third ventricle cause disturbances of motion, having a great similarity to those seen after section of the semi-circular canals. There are forced movements with corresponding changes in the position of the eyes, nystagmus, characteristic disturbances in equilibrium and distinct changes in muscle tonus. In his article upon the cerebellum he mentions Bolk and Von Rymberk's researches upon the localized centers for the co-ordination of the movements of the muscles of the neck and the anterior or posterior extremities. E. Luna confirms these experiments on cerebellar localization. According to Bechterew, injuries to the cerebellum cause atonia, asthenia and abasia of the muscular movements.

After mentioning the experiments of Martin and Booker upon the action of the mid-brain upon the respiration and the subsequent researches of Christiani and Lewandowsky, he gives his and pupils' results from experiments upon the subject. Electric irritation of the anterior corpora quadrigemina usually causes more or less deep inspirations, or inhibition of respiration in inspiration. Electric irritation of the posterior quadrigemina produces quick expiratory blasts or arrest in expiration with closure of the glottis, which permits of broken sounds, as in phonation. He also saw after irritation of the posterior corpora quadrigemina erection of the penis. As to the locus niger, he states that anteriorly it is in communication with the caudate nucleus and with the cerebral cortex, especially with the operculum and neighboring parts in the Sylvian fissure. These fibers are efferent in nature. Posteriorly the locus niger has connections with the fillet of an efferent nature, and in the crus cerebri, fibers

of an efferent nature. Bechterew from experiments by his pupils thinks the locus niger contains centers for swallowing and chewing of the second order, those of the first order being in the cerebral cortex. Ott has also shown by mechanical irritations that the locus niger contains a detrusor center for the bladder, a center of the second order. After puncture of the tuber cinereum he found that the out-take of CO_2 increased; this increase corresponded with the augmentation of the body temperature and was especially marked in the first hour after the operation, when it gradually diminished. Experiments with d'Arsonval's calorimeter also showed after puncture of the tuber cinereum an increased production and dissipation of heat. He holds the tuber to have an undoubted influence upon the metabolism of the tissues. Tumors of the hypophysis produce a rise of temperature by pressure upon the tuber. These data of Bechterew confirm our own American Ott's experiments upon the tuber cinereum; that it is a thermogenic center and that puncture of it produces increased production of heat. Sternberg and Latzow had a case of hemicephalus where the central nervous system only extended as far as the locus coeruleus, and had a marked insufficiency of temperature regulation. This case is contradictory to that of Dr. Dana, where in the absence of the cerebrum, the thalamus and the cerebellum the temperature was normal. Latzow's case shows the want of ability by the vaso-motor, respiration and sudorific centers to regulate temperature without those centers anterior to them. Bechterew found after removal of the hypophysis a lowering of the temperature on the day of the operation and a marked sinking of it before death. The removal of this body caused arrest of growth in the anterior and posterior extremities, with a partial arrest of growth in the skull. There was after total absence of the hypophysis an absolute increase of phosphates and nitrogen in the urine, with a fall of CO_2 , oxygen and water by the lungs.

Bechterew holds that the hypophysis has a tonic influence upon the tissues containing phosphorus and nitrogen and neutralizes poisons in the blood.

Besides the sensory part of the thalamus, he believes it

has centers for the movements of the intestines, for the two sphincters, for the bladder, the volume of the spleen, the volume of the penis, the movements of the uterus and vagina. Also centers which stir up the secretion of the testicles, prostate, stomach and liver. He confirms the existence of a thermogenic center in the corpus striatum.

CONTRIBUTIONS TO THE SCIENCE OF MEDICINE AND SURGERY.

By the Faculty in celebration of The Twenty-Fifth Anniversary, 1882—1907, of the founding of the New York Post-Graduate Medical School and Hospital, 1908, is a volume of decided merit.

The frontispiece bears the strong character and attractive face of D. B. St. John Roosa, which alone should make the volume sought for by the alumni of this well reputed school of post-graduate instruction. One of the jewels in the bright crown daily increasing in brilliancy of American medicine is the interest its profession takes in advanced medical education. The physician is not satisfied with his diploma of M. D., but continues a student all his days and seeks out betimes as he prospers in his profession, to add post-graduate instruction to his experience and qualification to practice.

This volume is well edited and thoroughly illustrated.

While *The Alienist and Neurologist* studies man in his entirety and has profited by all the articles in this valuable volume, the contents and illustrations of Sheffield's contribution to idiocy and allied mental deficiencies in early childhood, the treatment of Basedow's disease, by Carl Beck; Neuritis and Its Relation to Intestinal Putrifaction Processes, by Graeme Hammond, Amaurotic Family Idiocy, by A. E. Davis, the Etiology of Eye Strain and some medico-legal aspects of inebriety, will especially interest neurologic and psychiatric clinicians, as well as the general practitioners, among our many readers. The article on Hepato-intestinal toxemia will be helpful to any one who would appreciate the significance of a healthy liver and the importance of a constantly cleansed prima via and a possible non-toxic blood in the right management of any disease.

The introduction by Dana is classical and a true tribute to the lately dead and yet lamented Roosa.

The volume is really memorial of the dead coryphaeus. This memorial introductory of Dana's contains words of tribute from Clarence Blake, Wm. Osler and others. Every alumnus of the New York Post-Graduate should have this volume and treasure it as beyond price.

While this is a delayed review its material is still up-to-date and shows what the school has been doing and can do.

THREE MODERN SEERS. By Mrs. Havelock Ellis, author of "My Cornish Neighbors," "Steve's Woman," "Seaweed," etc., Illustrated from portraits. London, Stanley Paul & Co., 1910.

This work by Mrs. Havelock Ellis, is a fascinating exposition of the teachings of James Hinton, Nietzsche, and Edward Carpenter. The first was a remarkable genius too little understood. The time Mrs. Ellis rightly thinks is now ripe for sympathetic comprehension of his mystic message. Hinton's "Rest and Pain" published in 1881 by Wood & Co. will always remain a medical classic. Its teachings are still heeded by surgeons and neurologists. The philosophy of the so-called Weir Mitchell "rest cure" is largely based on Hinton. As W. W. Ireland showed in *The Alienist and Neurologist* a decade ago, Nietzsche was a paranoiac who twisted into absolute dicta relative truths. While rightly protesting against poisonous morbid sympathy which creates the social parasitism of hysterics, paupers, chronic invalids, professional "reformers," "philanthropists" and other defectives Nietzsche denounces all sympathy as of this variety. His views as to evil are essentially those of Emerson paranoiacally expressed. While Nietzsche has undoubtedly acted as a poison on German militaristic and nativistic pose, still he couldn't but prove a tonic to victims of the "Anglo-Saxon" obsessions of alcoholophobia, prurient prudery, religiosity and other newspaper pander sentimentalities. Forcibly logical and humane as were Malthus' teachings as to the dangers of morbid sympathy in increasing social parasitism they have fallen into desuetude under the Phariseism which subsidizes

hospitals, universities, research institutes, churches and charitable institutions to the sound of newspaper trumpets, with tainted cash. Edward Carpenter was a great thinker whose mysticism was much more monistic even than that of Emerson. His zoophilism as expressed in his vegetarianism undoubtedly tinged his mental atmosphere morbidly. The style of the book is clear and vivid.

NURSING FOR THE NEUROLOGIST; THE PSYCHIC FACTOR AND WHAT TO AVOID; THE PRINCIPLES THAT GUIDE. By Tom A. Williams, MB. CM. Edin., Washington, D. C. Trained Nurse and Hospital Review, 1910, June.

There are four types of case (1) organic nervous disease, (2) "nervousness" proper, (3) manageable mental alienation, (4) the ill conducted or evil tempered, the adult edition of the spoiled child.

The first-class is not considered in the paper, which is prefaced by an indication of the qualities which the nurse should possess. These are mainly derived from the experience of Dr. Weir Mitchell, his father and his son. A good nurse may be unsuitable for a certain patient. The absolutism of the hospital is out of place in the psycho-neuroses. Delicacy of thought outvalues rigidity of discipline. Keen observation and power to describe *facts* to the doctor are of great help. A list of almost incredible solecisms actually committed by nurses is given.

Dr. Weir Mitchell prefers English women as nurses because they have no erroneous notions about the true meaning of democracy or the doctrine of equality. A nurse should be good looking, which is no bar to the plainest, who by right doing and thinking can make herself attractive by the true good manners which cannot be substituted by ape-like conventionality. Repose of manner, if not due to vacuity or indifference, is essential. Metaphorical squaring of the elbows is most obnoxious.

The more accomplishments the nurse can command the better for the upbuilding of her patients' psyche. The handicrafts are of great value. A knowledge of botany is a recommendation. A mind well stored with the beauties of litera-

ture is a great help; and the power to read or recite quietly with intelligent phrasing cannot be too highly estimated. This is particularly valuable in inducing sleep or tranquilizing a perturbed mind. But care must be shown in choosing passages which do not light up painful memories, and a nurse should possess a large repertoire to fit different moods, but should not take the responsibility of choice except under the direction of a physician. Some patients require mastery rather than delicacy. Beware of suggestibility and never attempt suggestion, it is the doctor's province. Never deceive a patient.—*Author's Abstract.*

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA, Third Series, volume thirty-one, Philadelphia.

This volume comes to us full, like its predecessors, of valuable matter, creditable alike to its meritorious author and the worthy and venerable society whence it emanates.

While the entire table of contents will interest and instruct the physician, "The Law of Degeneracy in its Relations to Medicine," by Charles P. Noble; Pemberton's "Contributions to Myasthenia Gravis," Cohen's "Essential Pentosuria" and Paul Lazarus, "Spasm of the Arteries," will especially challenge the rapt attention of the neurological readers of *The Alienist and Neurologist*. Fisher on "Oedema" will interest any reader. Of course Weir Mitchell is in evidence as he ought ever to be while he lives, in his apt response to President Tyson's address. The latter with Joseph Sailer give a splendid contribution on "Exophthalmic Goiter" discussing its serum treatment, etc. Fletcher's address, Billing's address and other matter of interest at the dinner must be omitted for want of space. The new hall is a thing of beauty and will be a joy forever we hope, to the profession of Philadelphia. We hope no foul personal ambitions may ever mar the glory and utility of this great organization, a fate which too often mars the good and useful aims of medical societies.

THE SYMPTOM-COMPLEX OF THE ACUTE POSTERIOR POLIOMYELITIS OF THE GENICULATE, AUDITORY, GLOSSOPHARYNGEAL AND PNEUMOGASTRIC GANGLIA. By J.

Ramsay Hunt, M. D., New York, in the Archives of Internal Medicine, June, 1910, Volume 5, Pages 631-675.

A splendid painstaking contribution to the literature of this interesting subject which may be read with profit by all interested in problems connected with the auditory mechanisms. The author discusses herpes zoster, especially the otitic variety in an especially instructive way, to the neurologist and the philosophic physician in general.

It would be profitable to the profession if the author would add a study of his subject in connection with professional singers, their herpes, psychasthenias and voice failures and brain strain relation thereto, a causative factor too much overlooked.

ASCLEPIADES AND CELSUS ON MANAGEMENT OF MADNESS.

A Johns Hopkins Hospital Bulletin reprint before us is a valuable contribution on this subject, being Dr. Smith Ely Jelliffe's paper on Psychiaters and Psychiatry of the Augustan Era.

In summing up this brief treatise, which represents the most extensive work of any of the ancients upon madness, Celsus, says Jelliffe, lays down the following rules: That "Mad people ought to be strongly exercised, to have much friction or massage, to take neither fat, flesh nor wine, to eat lightly after purging; that they should neither be alone nor among strangers, nor among those whom they despise or look upon with indifference; that they ought to travel in other countries, and, if their judgment returns, to take a journey into distant parts once a year."

It is a sorry comment, Jelliffe concludes, on the latter days that all that was bad in Celsus' system, the chains, the beatings and the darkness, were faithfully copied for centuries; while all that was good in the therapy of Aselepiades, the music, the sports, the cheerful thoughts, as well as the massage and regular exercise and change of air, was overlooked and almost lost."

And so say we all of us, as modern psychiaters regarding the insane man as a sick man with claims upon our highest humanity as well as our best therapy.

GENESIS. A Manual for the Instruction of Children in Matters Sexual. For the use of parents, teachers, physicians and ministers by B. S. Talmey, M. D., former pathologist to the Mothers' and Babies' Hospital and gynecologist to the Yorkville Hospital, New York, with nineteen cuts, forty-seven drawings in the text, pp. 194. The Practitioners' Publishing Co., 12 West 123rd Street, New York City. \$1.50 net.

This book by the well-known [author of "Woman, a treatise on the normal and pathological emotions of feminine love," is before us.

This valuable book begins in a simple way with the sexual life of plants and gradually leads up to essentials plainly and naturally presented without libidinous suggestion of important sanitary matters connected with sexual functions in human beings.

The book is arranged in lessons suitable for instruction of the young from twelve years to maturity and ought to be of great value through judicious use, to the sanitation of mind and body of human beings.

L'APHASIE DANS SES RAPPORTS AVEC LA DEMENCE ET LES VESANIES. Etude historique, clinique et diagnostique. Considérations médico-légales, par le docteur Maurice Brissot, ancien interne des Asiles de la Seine. Un volume in-8 raisin de 256 pages avec 9 figures. Prix: 8 fr. G. Steinheil, 2, rue Casimir-Delavigne, Paris.

Dans ce travail, l'auteur étudie la question, si controversée à l'heure actuelle, des rapports de l'aphasie avec la démence, en laissant de côté le point de vue anatomique.

La première partie de cet ouvrage est consacrée à l'état mental des aphasiques tels qu'on les rencontre journellement dans les services hospitaliers, c'est-à-dire de ces malades chez qui les troubles du langage ne sont pas contemporains de manifestations délirantes ou démentielles antérieures ou postérieures à l'aphasie. A ce sujet, l'auteur rappelle la doctrine de M. le professeur Pierre Marie: celui-ci pose en principe que tout aphasique est un être à intelligence affaiblie et que cet affaiblissement des facultés mentales n'a rien de

commun avec un trouble démentiel: l'aphasie, dit-il, n'est pas démenée. Or M. Brissot discute cette manière de voir et propose la formule suivante:

Si certains malades sont, sans contredit, des amoindris psychiques, beaucoup d'autres conservent l'intégrité des fonctions intellectuelles.

2 A côté de ces individus normaux ou frappés de déchéance mentale, il existe de véritables déments (déments organiques par lésions circonscrites).

3 Le sujet porteur d'une lésion circonscrite des centres du langage n'est qu'un blessé du cerveau, un cérébral, mais nullement un affaibli intellectuel. Seules, les altérations diffuses surajoutées peuvent expliquer l'apparition de la démenée.

Faisant abstraction de la déchéance mentale qui peut subvenir chez ces malades, l'auteur a principalement en vue, dans une seconde partie, les aphasiques aliénés, dont les troubles du langage se manifestent au cours de certains états démentiels (déménée sénile, paralysie générale) ou délirants.

PEDIATRICS FOR AUGUST is an interesting number devoted to poliomyelitis. The articles well treated and illustrated are by Strauss, Kerz, Anderson, Shidler, Fowler, Russell, Coulter, Armstrong and Flexner, besides an editorial on this interesting subject by Fitch.

Our Insane. By William Mabon, M. D., Superintendent and Medical Director of Manhattan State Hospital, Ward's Island, New York City.

The Danvers State Hospital Laboratory Papers of 1910, Charles W. Page series, is a monument of meritorious work, laboratorial and clinical, not yet equalled from any other source coming under our observation this year.

We should have liked to have published the same as an extra, but the enterprising and psychiatrically appreciative *Boston Medical and Surgical Journal* has anticipated us as far back as August 4th. No alienist can afford to be without this series.

The Therapy of Work. By Robert S. Carroll, M. D., Asheville, N. C.

Bemerkungen zum Vorentwurf des Strafgesetzbuchs Herausgegeben von der Justiz-Kommission des Deutschen Vereins für Psychiatrie. Dr. Moeli, Geh. Med.- Cramer, Aschaffenburg, Hoche, Longard, Schulze, Vocke. Jena, Verlag von Gustav Fischer, 1910.

Trophoneurotic Changes in Bones and Joints in Leprosy. By Frances Harbitz, M. D., of Christiania, Norway, in Vol. 6 of the Archives of Internal Medicine, number 2, is the best written and most thoroughly illustrated treatise on the subject we have seen among the exuberant literature of medicine which comes to our sanctum editorial.

Eighty-sixth Annual Report of the Officers of the Hartford Retreat at Hartford, Conn., 1910.

Report for the Fifth Fiscal Year of the National Association for the Study and Education of Exceptional Children, Watchung Crest, Plainfield, N. J.

Bulletin number 41 of the Committee of One Hundred on National Health. Organ of the American Health League, on "Commercial Interests Oppose National Department of Health."

As usual when a measure for the welfare of the people opposes personal interests we hear a new battle cry of Freedom "in a horn." A far and false cry of greed, quackery, visionary cults and dementia publica.

St. Louis Public Library Annual Report, 1910.

The Submucous Operation on the Nasal Septum, a Plea for a More Rapid Technique. By J. E. Mackenty, M. D., New York.

Junod's Blood Derivations. By Gustavus Werber, A. M., M. D., Washington, D. C. An excellent paper for the consideration of the practical therapist, from the *Journal of Advanced Therapeutics*.

Studies in Relation to Malaria. By Samuel T. Darling, M. D., Washington.

Actes et Manifestations Diverses, de l'association Medicale Internationale pour aider a la Supression de la Guerre.

A good purpose and an appropriate field for a profession whose mission, as our Baron Larrey, the great French Surgeon, said to the great Napoleon, "is to save life, not to destroy."

The Office of Coroner, its past, its present and its advisability of abolishment in the commonwealth of Missouri. By R. B. H. Gradwohl, M. D.

A good paper on a timely subject by a good man competent to discuss this subject.

Are Doctors "Grafters?" Emory Lamphear, M. D., St. Louis.

Action of the Ions Produced by Radium. By Heber Robarts, M. D., St. Louis.

After All, What? By C. A. Bryce, A. M., M. D.

Experimental Studies on Round Ulcer of the Stomach and Duodenum. By Fenton B. Turck, M. D., Chicago.

A Combined Gastroscope and Gyromele for Diagnostic and Therapeutic Purposes. By Fenton B. Turck, M. D., Chicago.

Observations on Brain Surgery and Report of Some Interesting Cases. By William E. Fitch, M. D., New York.

Radiculitis. By F. W. Langdon, Cincinnati.

Feeding of Infants in Diarrhoea

MELLIN'S FOOD

2 level tablespoonfuls

WATER

8 fluidounces

Analysis of above mixture:

Fat	trace
Proteids (cereal) . . . .	.53
Carbohydrates (no starch)	4.33
Salts . . . . .	.23
Water	94.88
	100.00

Calories per fluidounce=6.2

To be given cold or very warm, (never lukewarm) in small amounts, frequently repeated, for a day or more, or until stools lessen in number and improve in character.

Then milk may be added in small quantities until full diet is reached.

We cannot emphasize too strongly the benefit of such a diet in all forms of Summer diarrhoea.

Additional formulas may be found in our book, "Formulas for Infant Feeding," which will be sent free upon request.

Mellin's Food Company,

Boston, Mass.

PUBLISHER'S DEPARTMENT.

THE HUMAN ROOKERIES OF KING'S ISLAND, BERING SEA.

—A more forsaken, widely-desolate, oppressingly-isolated isle, wrapped in cold deathliness, cannot be imagined. The barren rocks cannot sustain life, nor is there level ground more than sufficient to allow the seagull to perch. Of all the place in the world this should be the last expected to be inhabited by mankind, and if this world should become so over-populated that ground everywhere were as valuable as Broadway, this rock would be the last taken up. Yet a sturdy fraction of the human species is living on King's Island.

In his open skinboat, the Eskimo has brought poles of driftwood forty miles from the mainland, crected a platform, on it built a box-like frame of poles and over this stretched thick walrus hides, ingeniously laced and padded. A small hole in the top, covered with transparent walrus-gut, forms the window. The door or only entrance is a hole, two feet square, through which he crawls. This box-like dwelling is surrounded on two or three sides by a shed, or storm porch, acting as storeroom and wind-break.

For two months in the summer, he leaves his rocky aerie and has a vacation on the mainland, gathering berries, catching salmon and trading his polar bearskins and ivory cribbage-boards for a few sacks of flour. Then he returns to his island home for another ten months of isolation. Often he has to wait for weeks to cross the sea in safety and be able to make a landing. Yet he clings to his mid-ocean rock-pile with as fervent a love as the Swiss to his Alps. Nature's law perforce has made the King's Island Eskimo the most skillful boatman and daring hunter of his race. The barren rocks,

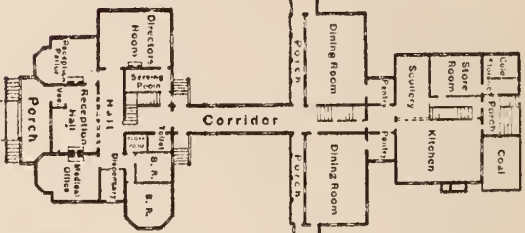
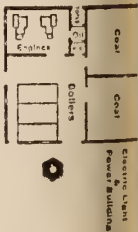
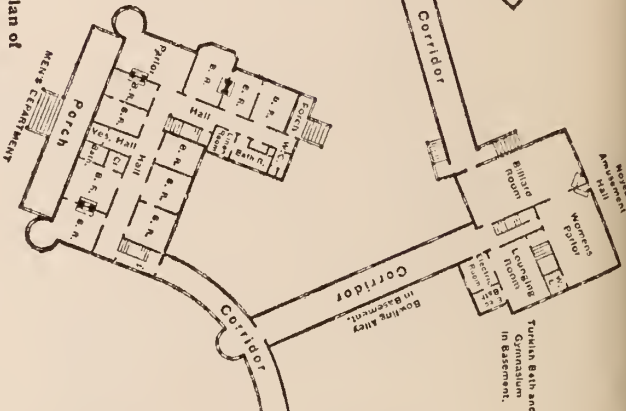


ORIFLAVO BUILDING
FOR ACUTE CASES

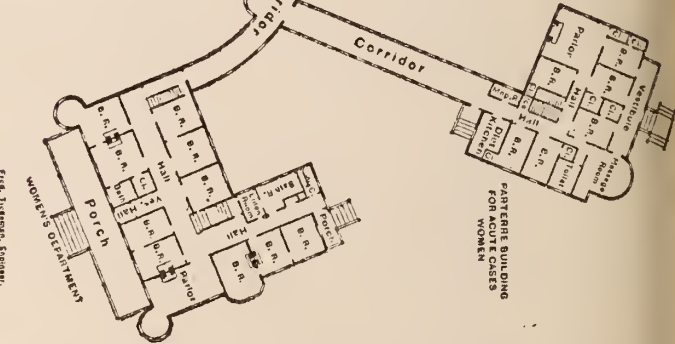


Ground Plan of OAK GROVE,

Hospital for Nervous and Mental Diseases,
Flint, Mich.



ADMINISTRATION BUILDING



PATIENTS BUILDING
FOR ACUTE CASES
WOMEN

WOMEN'S DEPARTMENT

Price, Talcott, Engineer.

Diagram of walls, machinery, stairs, and view of the

THE IDEAL ARRANGEMENT OF BUILDINGS FOR THE ADMISSION OF SUNLIGHT IS OBVIOUS WHEN REFERENCE IS MADE TO THE COMPASS POINTS ABOVE SHOWN. THE FRONTAGE OF THE DEPARTMENT FOR MEN IS ALMOST DUE SOUTH. THE LOCATION OF PORCHES INSURES A LARGE DEGREE OF SECLUSION AND PRIVACY TO THEIR OCCUPANTS.

refusing even to shelter him on their forbidding breasts, have compelled him to live in mid-air and wrest his living from the sea.

On rough days when some one has to get out, it is done in this manner: an Eskimo takes his seat in the kyack, ties his hooded waterproof parka over the opening, then four men grab him, kyack and all, and throw him from the face of a cliff, into the breakers. With consummate skill he makes his way out, perhaps to the lee of the island, where he hunts till the storm is over, then returns to the village, laden with seal and birds.

When the gigantic icefloes are hurled by the polar current with Titanic force against his little island, threatening to brush it away like chaff before the wind, he recks it not, but sturdily treads the floes in semi-darkness, stalking the sea and walrus and grappling with the polar bear. — *Captain F. E. Kleinschmidt, in Pacific Monthly.*

It would be interesting to know if there are any tuberculotics among these open air and salt sea living people. The magazines would do well if they employed more writers of localities, peoples and things, who have habits of medical observation derived from medical education. There should be more doctors of medicine on their staffs.

OVERWORKED.—The owner of the farm had been enjoying himself at the county fair while his hard-working wife stayed at home to see that the farm suffered no loss in his absence.

"Well, Sarah," said the owner upon his return. "I'm about all tired out. Is the cow in the barn?"

"Yes, long since," replied his wife, barely looking up from the task then in hand.

"Is the hosses unharnessed an' fed?"

"Yes."

"Chickens locked up?"

"Yes."

"Wood chopped for mornin'?"

"Yes."

"Wagon-wheel mended an' ready t' start in th' morning?"

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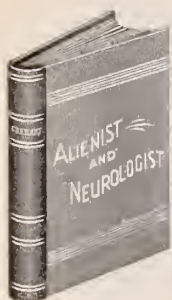
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"Yes."

"Well, then," concluded the exhausted owner, with a sigh of relief, "let me have my supper. I'm goin' t' turn in. Farm-in's beginning t' tell on me."

Apropos the above, when Dr. C. H. Hughes was superintendent and physician-in-chief of the Missouri State Hospital number one, a farmer brought his insane wife to the doctor and expressed his astonishment that she should have lost her mind, saying "she was the best of women and most devoted of mothers and always looking well to the ways of her household like the woman Solomon so cordially commended, always at home attending to the business of house and farm, never 'gadding'" about as he called it, "nor running around to societies like other women. He could leave home any time and things went on as well on the farm as they did when he was there."

He could not understand it. Doctor Hughes told him that was the matter with his wife. She was last to bed at night and first to be up in the morning, took no adequate brain rest and her brain broke in its functioning. The woman rested long from her home overwork and recovered.

WALKING.—An item in our London letter this week again calls attention to a form of exercise as healthful in this country as it is uncommon. Surgeon-Major Hinton, who enjoys the distinction of being the oldest member of the Royal College of Surgeons, in his ninety-fifth year is reported as "walking for pleasure five miles or more a day." How many Americans—physicians or laymen—of even one-third the age of this veteran surgeon walk half that distance daily? In the country the buggy, in the city the ubiquitous street car, and in both the ever-increasing number of automobiles, all operate to make us a nation of riders rather than of walkers. While within the past year walking has been taken up as a passing fad, pedestrianism as a recreation is practically unknown in this country.—*Jour. A. M. A.* Better return to it.

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The Pacific Monthly, of Portland, Oregon, is a beautifully illustrated monthly magazine which gives very full information about the resources and opportunities of the country lying West of the Rockies. It tells all about the Government Reclamation Projects, free Government land and tells about the districts adapted to fruit raising, dairying, poultry raising, etc. It has splendid stories by Jack London and other noted authors.

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CELTIC ELEGY.

These eyes have never seen it, but I know now where it lies—

Your green grave, Asthore, a half a world away;

For I've heard the plover calling as over it he flies;

" 'Tis only here at last in rest your weary head you'll lay."

Oh, far's the road to Sheelagh burn—ten thousand lonely miles—

But now you'll know I'm coming soon, my fevered cheek to lay

Against your cool, green pillow where Kildare's blue sky smiles;

For I've picked the false world's shrivelled heart and thrown the husk away.

Oh, take your rest, Alanna, for your dreams have fared to me;

All night I heard you calling from the green hill where you lie;

All night I heard the plover crying shrill across the sea:

"No rest you'll find but with the trusting heart that you put by."

—*Charles T. Rogers, in October Pacific Monthly.*

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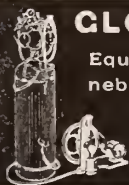
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A CASE FOR SCIENTIFIC JUSTICE.—What constitutes a negro in the United States may be a question which the United States Supreme Court soon will be asked to settle. One-sixteenth negro blood in an individual classifies him as a negro in the District of Columbia, according to a decision by Justice Daniel T. Wright of the District Supreme Court in the case of Isabel I. Wall, an 8-year-old child, who recently was barred from a white public school because the principal had information that she was of octoroon parentage.

The father of the girl attempted to force the board of education to reinstate the child, but failed, Justice Wright deciding she was a negro. The case was appealed to the District Court of Appeals. If the Appellate Court affirms Justice Wright's decision an effort will be made immediately to have the United States Supreme Court pass upon the question. — *Associated Press.*

Here is a case for scientific hematology. Let the microscope show if this child's blood contains a preponderance of Caucasian blood cells or any African blood elements at all. "*Fiat justitia, ruat cælum.*"

A GOOD MOVE FOR THE GOOD OF THE PROFESSION AND PEOPLE.—The American Medical Association has begun a campaign of publicity concerning public health matters and health exhibits.

TO INCREASE FLOW OF BILE.—"Chionia is claimed to have specific action primarily and principally on the liver. It does not purge and should never be given with the idea of obtaining cathartic action. It stimulates the hepatic functions, increases the flow of bile and reduces congestion of the biliary passages."

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COLUMBIA UNIVERSITY has made a mistake in establishing a separate course in optometry. Optometry is only a part of ophthalmology and is taught in connection with that chair in medical schools and should not be taught to others than medical students.

HOW HE READ MEDICAL FRENCH.—An aspiring garcon in the editorial office of the *Alienist and Neurologist*, wishing to display his knowledge of the French language, read from the *Sommaire* of *Le Progres Medical* the following: "Burnier, —De l' amaurose albuminurique chez les femmes encientes" and rendered it thus in English: "Amorous albuminuries among women in a "family way."

SANITATION OF THE CANAL ZONE.—The report of the Department of Sanitation, Canal Zone, for the month of May, 1910, made by Dr. John L. Phillips, Acting Chief Sanitary Officer, shows that the annual death rate per thousand from all causes among the white employees for the month of May, 1910, was 9.94. For May, 1907, the rate was 18.34, and since that time there has been a steady decrease. The same rapid decrease is noted among the black employees, the death rate among this class being 34.48 in May, 1907, and 6.98 in May, 1910. Throughout the Canal Zone and the cities of Panama and Colon the rate during the months of May has been as follows: 1907, 31.57; 1908, 20.87; 1909, 15.77; 1910, 18.69. The number of employees in May, 1907, was 39,003 with 98 deaths; in May, 1908, 44,816, with 39 deaths; in May, 1909, 46,974, with 37 deaths; and in May, 1910, 52,863, with 34 deaths. Of these last, 6 were from tuberculosis, 2 from dysentery, and 1 each from black water fever, malarial fever, typhoid fever, and pneumonia. The total number of white Americans connected with the commission and the Panama Railroad during the month, including employees and their



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families, was 10,285; among these there were 6 deaths, 4 from disease and 2 from external causes, an annual death rate of 7 per thousand. Of malarial cases among employees discharged and died from hospital during the month there were 2 deaths and 618 discharges. No plague, smallpox, or yellow fever originated on or was brought to the isthmus during the month. The general sanitary conditions were reported as favorable, although the weather had been such as to further the development of mosquitoes and malaria; the malarial sick rate for June may show the effects of this. During the month of May 1,807 rats were destroyed, and 6 houses were fumigated.

DR. KASSABIAN: MARTYR.—Another name has been added to the list of medical pioneers who have sacrificed their lives in the cause of science. Dr. Mihran K. Kassabian, director of the Roentgen Ray Laboratory in the Philadelphia General Hospital, died on July 13th, as a result of burns received during his experimentation with the mysterious X-rays.



MIHRAN K. KASSABIAN.

Dr. Kassabian, who was an Armenian, was born in Cæsarea, Asia Minor, 42 years ago, and in 1894 came to the United States to study medicine. He entered the Medico-Chirurgical College in 1898, and in the same year, while the

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Spanish-American War was in progress, served in the Hospital Corps of the army and attended many sick and fever-stricken soldiers brought from the Southern camps. After graduating he became instructor in electro-therapeutics and X-ray treatment in Medico-Chirurgical College.

A number of operations for the removal of affected glands were performed by Drs. W. W. Keen and J. Chalmers DaCosta but without avail, and he passed away in the prime of his life of useful endeavor and faithful allegiance to his profession.

The most important of his many works, "Electro-therapeutics and the Roentgen Rays," is now used as a text-book in leading medical colleges, and a revised edition was brought out by Lippincott only a few weeks prior to his death.

His portrait is kindly supplied by the J. B. Lippincott Company.—*C. H. F., in Med. Herald.*

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No. 4.

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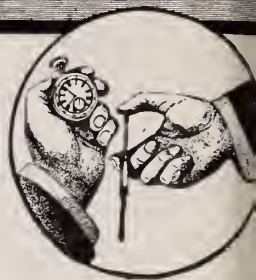
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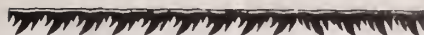
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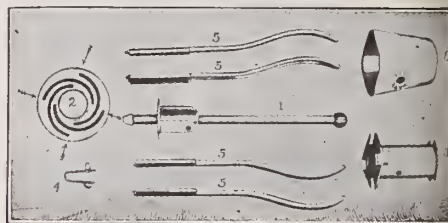


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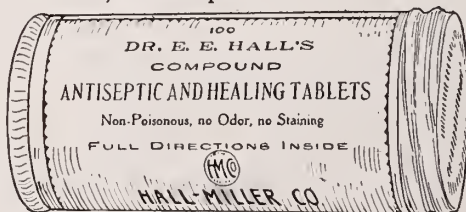
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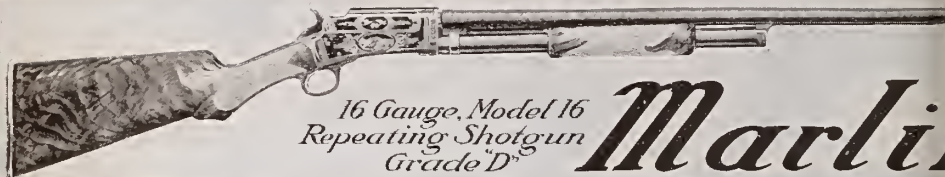
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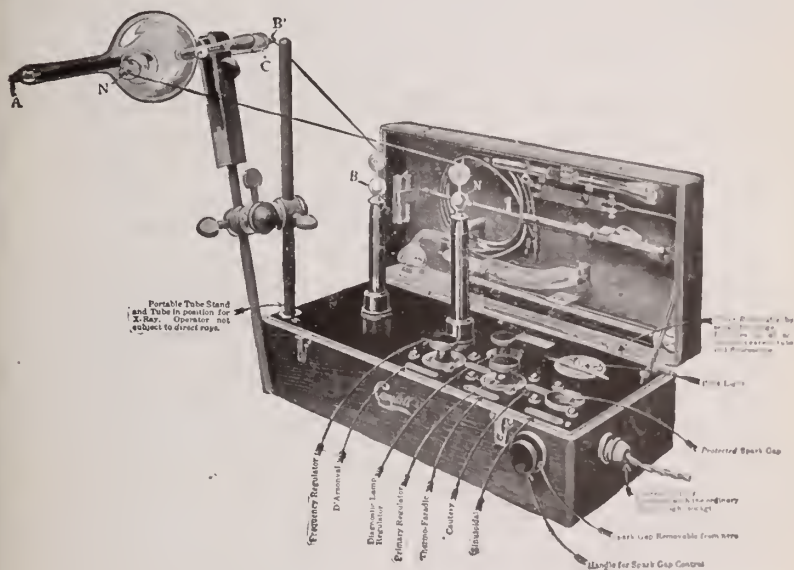
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